MANUFACTURERS RECORD

Another Milestone

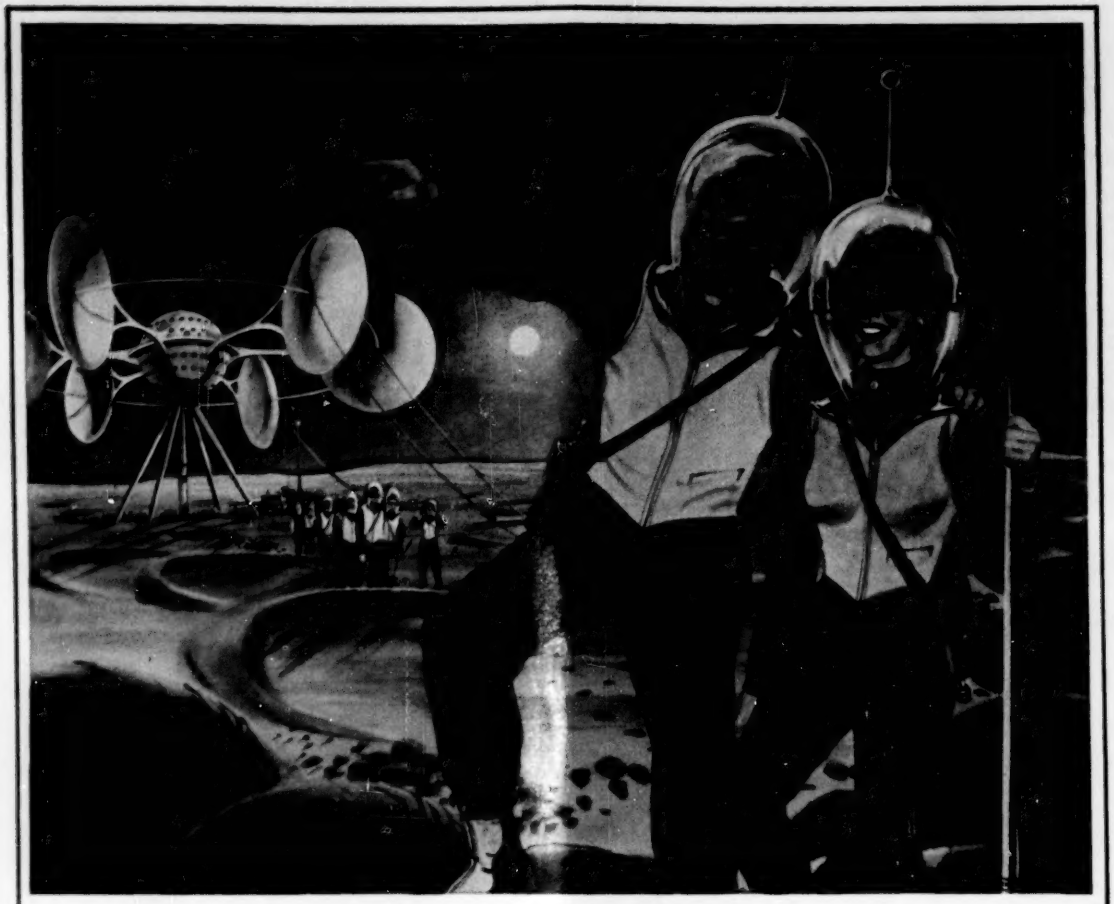
BEGINNING with the January issue *Manufacturers Record* will be under new ownership and management. The present owners and publishers in disposing of the property were motivated by one primary consideration—to make the *Record* and The Blue Book of Southern Progress more valuable to their readers, advertisers and the area they serve.

For more than 73 years this publication has been the acknowledged leader among the many forces working for the industrial development of the South. We, as the publishers have felt this responsibility quite keenly and therefore have been very particular in our selection of a purchaser. The new publisher had to be a man who fully recognizes the part that *Manufacturers Record* has played in the South's development and who knows the whys and wherefores of our conviction that the South has the potential to become the nation's greatest economic asset.

We believe we have satisfied these demands in the selection of H. McKinley Conway, Jr. of Atlanta. His background and wide experience in matters concerning the South's development, as Executive Director of the Southern Association of Science and Industry, make him eminently qualified. In addition we have the utmost confidence in Mr. Conway's integrity and ability. These factors combine to assure us that the *Record* will continue in its position of leadership.

Thus assured, we refer you to "A Pledge From Your New Publisher", which appears on page 25, and wish the *Record* continuing success and progress in promoting the economic life of the South.

The Publisher



THE SUN'S HEAT AND GIANT REFLECTORS may convert cosmic energy into power that will propel space ships to distant planets.

100 years from now...

WE MAY "SIGHT SEE" ON MARS

A century from now, when undreamed-of marvels transform our way of life, civilization will still rely on one familiar public servant: the cast iron pipe laid today will continue to carry water and gas to the homes of the future.

Proof? 69 American cities and towns are still using cast iron water and gas mains over a century old. And today's modernized cast iron pipe . . . centrifugally cast and quality controlled . . . is even stronger, tougher, more serviceable.

U.S. Pipe is proud to be one of the leaders in a forward-looking industry whose service to the world is measured in centuries.

U.S. PIPE

CAST IRON

U. S. PIPE AND FOUNDRY COMPANY, General Office: Birmingham, Alabama

A WHOLLY INTEGRATED PRODUCER FROM MINES AND BLAST FURNACES TO FINISHED PIPE.

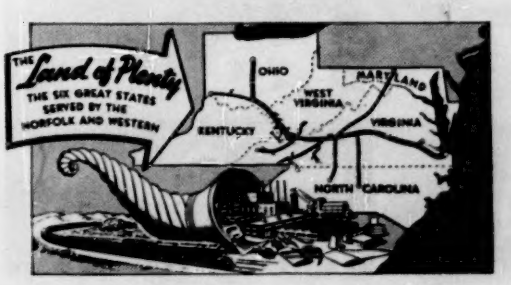
...By Looking Back

Looking back, the past 15 years have produced a tremendous industrial growth in The Land of Plenty, the six great states served by the Norfolk and Western. In a way, this look into the past is a look into the future for other companies who in the years ahead will also locate factories here.

The plants which have moved into The Land of Plenty represent all types, and all sizes — from nationwide concerns to small 50-employee operations — manufacturing a wide range of different products and meeting a wide range of specific problems. The fact that such plants have found the industrial advantages they require in The Land of Plenty is a promise that others will have the same high grade advantages if they build in this great area.

If you'll write, wire or telephone the N & W's plant location specialists, they'll be glad to tell you, without obligation or pressure, exactly what this growing industrial area offers to meet your specific requirements.

By looking into *The Land of Plenty's* past you'll see that many of the nation's most progressive manufacturers and marketers have put their roots down in *The Land of Plenty.* Looking ahead indicates there's a bright future for your plant here.



WRITE, WIRE OR CALL —

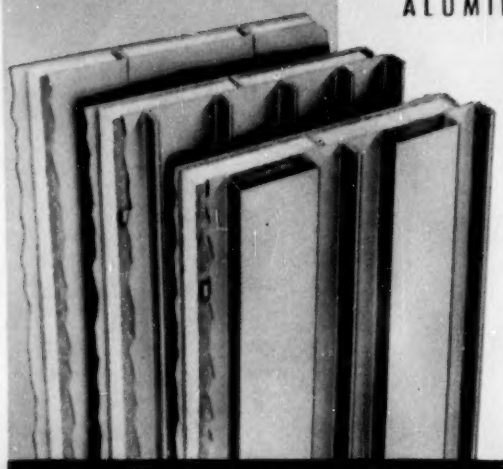
INDUSTRIAL AND AGRICULTURAL DEPT.
Drawer MR-684 (Phone 4-1451, Ext. 474)
Norfolk and Western Railway
ROANOKE, VIRGINIA

Norfolk and Western RAILWAY

INSULATED METAL WALLS

for INDUSTRIAL and COMMERCIAL BUILDINGS

ALUMINUM, STAINLESS or GALVANIZED STEEL



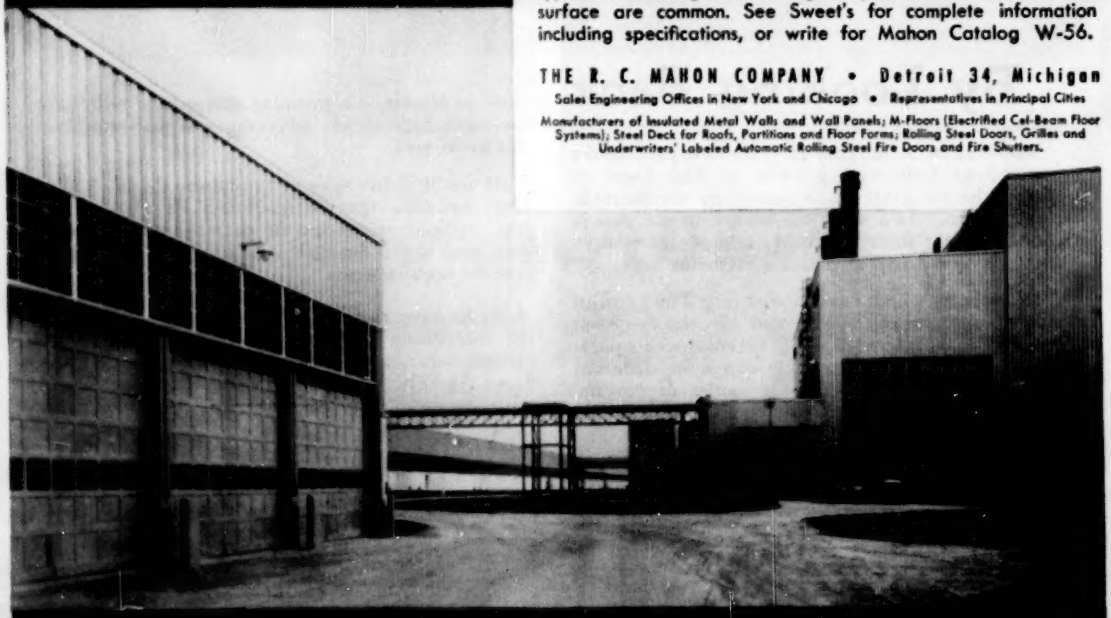
FLUSH, RIBBED, or FLUTED
Over-all "U" Factor of Various Types is Equivalent to or Better than Conventional 16" Masonry Wall

More and more architects every day are taking advantage of the low-cost permanence of light weight Stainless Steel or Aluminum curtain wall construction. New buildings and complete industrial plants with bright metal exteriors are appearing all over the country. In the past five years, one industrial concern alone has built nine complete new plants employing Mahon Metal Curtain Wall construction throughout—the plant illustrated below is typical. When you plan your next building, call in a Mahon engineer and let him tell you more about Mahon Insulated Metal Walls . . . let him show you some outstanding examples of architectural treatment in ALL-METAL exterior design, or, if you prefer, some attractive exteriors with metal in combination with brick, glass block or other materials. Have him give you cost figures, too . . . because, in this type of construction, important building economies are realized through lower material cost, lower labor cost, and the cumulative savings and advantages deriving from reduced construction time. Mahon Insulated Metal Walls are available in the three exterior patterns . . . the "Fluted" or "Ribbed" wall can be field constructed up to sixty feet in height without a horizontal joint—a feature of Mahon Walls which, from an appearance standpoint, is extremely important in powerhouses, auditoriums or other types of buildings where high expanses of unbroken wall surface are common. See Sweet's for complete information including specifications, or write for Mahon Catalog W-56.

THE R. C. MAHON COMPANY • Detroit 34, Michigan

Sales Engineering Offices in New York and Chicago • Representatives in Principal Cities

Manufacturers of Insulated Metal Walls and Wall Panels; M-Floors (Electrified Cel-Beam Floor Systems); Steel Deck for Roofs, Partitions and Floor Forms; Rolling Steel Doors, Grilles and Underwriters' Labeled Automatic Rolling Steel Fire Doors and Fire Shutters.



MAHON

MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest

Volume 124 December, 1955 Number 12

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Byfield, Manufacturers Record Financial Editor, Dies

Robert S. Byfield, Fiancial Editor for the RECORD and investment broker and adviser, died suddenly of a coronary thrombosis in New York at Doctors Hospital on December 1st. His age was 58, and he resided in New York at Sutton Place.

Mr. Byfield began his monthly column in the MANUFACTURERS RECORD, April, 1948, and his articles have been a valued and important part of the Editorial content of the magazine since that time.

Mr. Byfield, a member of the New York Stock Exchange with offices at 1 Wall St., was a broker, financial writer and an opponent of Marxist economic philosophy. He used the press, radio, magazines and the lecture platform to refute Communist distortions of the American economy.

In 1951 the New York Stock Exchange sent him to Europe to attend the United Nations General Assembly sessions in Paris as an observer. He continued as an observer for the Stock Exchange at the New York sessions of the U. N. in 1952 and 1953.

He was a frequent contributor to publications on economics and often participated in radio and television debates on the advantages of free enterprise and capitalism. He was an advocate of moderate corporate profits, deplored any drift toward socialism and argued for anti-trust laws.

Mr. Byfield was a director and trustee of Town Hall and a director and honorary trustee of Educational Alliance. He was a member of Phi Beta Kappa, New York Society of Security Analysts, Bankers Club of America and the American Legion. He had been vice president of the Union American Investing Corp. and vice president and trustee of Hotel Barbizon, Inc.

Listerhill Aluminum Expansion Underway in Alabama

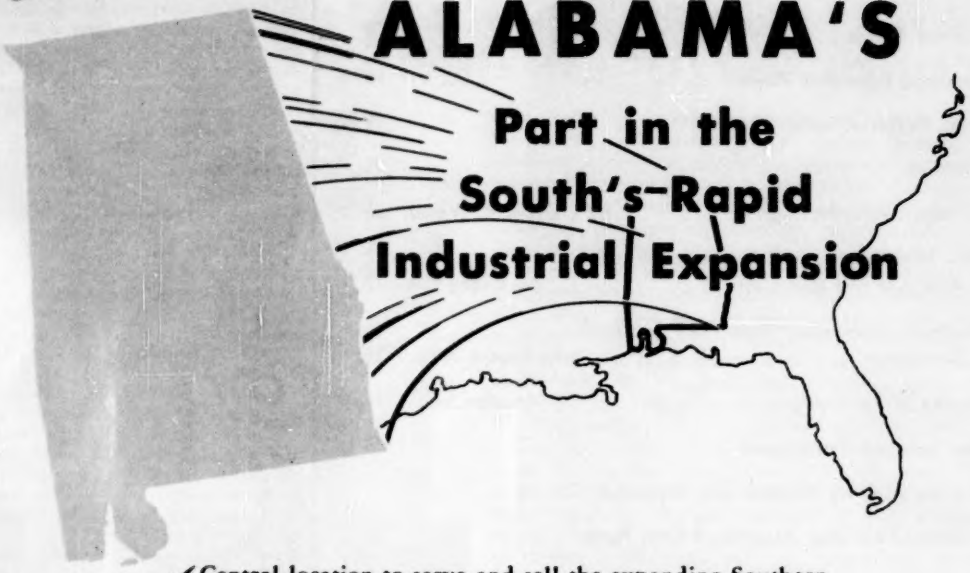
Construction work has been started on an $11,000,000 expansion program by Reynolds Metals Company at its aluminum reduction plant at Listerhill, Alabama. The announcement was made by J. Louis Reynolds, vice-president in charge of operations.

Mr. Reynolds said that the capacity of the plant will be increased from 100,000,000 to approximately 140,000,000 pounds of primary aluminum a year by enlarging the facilities at that location.

Plans call for completion of the work, which is being done without shutting down the plant, by July or August 1956, depending upon the delivery of materials.

Also included in the expansion will be an increase in the productive capacity of the carbon-paste plant, and the construction of an experimental potline to develop new types of pots by testing. The latter will require a new building at a cost of approximately $2,000,000. It will produce 3,200,000 pounds of aluminum a year. This is expected to be completed by February of next year.

EIGHT BIG REASONS For ALABAMA'S Part in the South's Rapid Industrial Expansion



- ✔ Central location to serve and sell the expanding Southern markets.
- ✔ An abundant supply of raw or semi-finished materials.
- ✔ Adequate sources of intelligent, easily-trained employees.
- ✔ An unlimited supply of pure water.
- ✔ Plentiful rail, air, water and highway transportation facilities.
- ✔ Splendid seaport facilities for export or import.
- ✔ Low cost, high quality fuels and an ample and dependable source of electric power.
- ✔ A climate that's pleasant all year-'round.

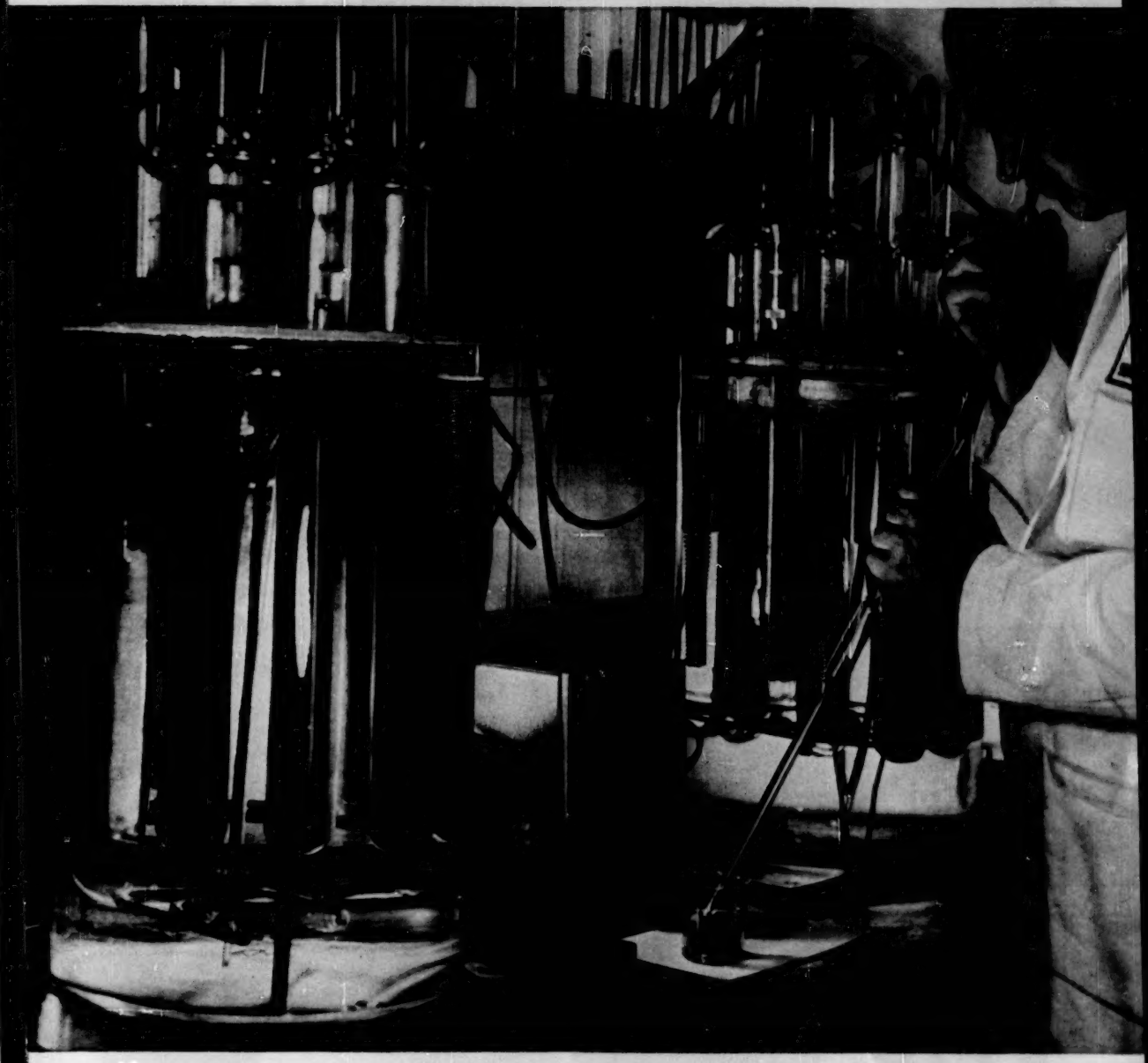
Our Industrial Development Department will gladly supply confidential information relating to locations suitable for your type of business. There is no obligation.

Alabama Power Company

Helping Develop Alabama

Birmingham 2, Alabama

GOING PLACES *into a drop of oil with Cities Service...*



Cities Service researchers enter the minute world of the molecule and come out with new and better products . . . for example, 5-D Premium gasolene and 5-D Koolmotor oil. The superior performance of these new products has boosted sales of Cities Service gasolenes at double the rate of industry demand.

CITIES SERVICE

A Growth Company

Number 15 of a series

...and for SERVICE

The streamline beauty of a Horton Watersphere® will complement surrounding architecture of your plant. Designed for beauty ... it has been built for service. A Watersphere provides dependable gravity pressure water supply that is always available. Less ground area is required than for a conventional tank and the base of the Watersphere may be used as a pump house or for storage area.

Write our nearest office for further information on a Horton Watersphere or other Horton storage tanks for your plant.

100,000-gal. Horton Watersphere built for the Rubatex Division of Great American Industries, Inc., Bedford, Va.

BUSINESS TRENDS

Boom Unabated

All Sectors Except Two Are at Peaks as South Presents Strong Front

The business boom has continued unabated through the closing months of 1955.

In all segments of the national economy except two, output and income have been making steadily increasing records.

Farming and Mining, while not at all time highs like the other seven sectors of private enterprise, are nevertheless at very high levels themselves.

From alarm over possible business decline, chief official concern has shifted to trepidation over possible inflation.

Some time ago practically all political elements were contemplating income tax reductions of variable amounts and types. Now a good number of these same elements are cautioning against further expansion of purchasing power such as that engendered by lower taxation.

Production High

On the production front gains over previous months have been established every month since July.

This record applies to nondurable goods as well as to durables, and also to minerals.

Output of steel and other metals has gone to especially high levels. Steel mill activity is now pressing hard against a roof of 100 per cent of capacity.

Products in which metals play important parts also are at high levels. Following model changeovers producers of automobiles and trucks have stepped up assemblies rapidly and are now turning out their products at peak rates.

Output of machinery and other capital goods also is registering steady gains. Shortages of parts have slowed up production of household and other consumer durables, but rates of output still remain at record levels.

Gains in nondurable lines reflect gains in some important sectors that have not always kept up with the swift pace of the boom. Expansion is picking up in Textiles, Apparel, Rubber and Leather. Paper, already at a high point, also has expanded further.

Construction

Building, long a mainstay to the boom, shows no sign of weakening. Housing starts remain substantially stable from month to month, but business and industrial building is expanding and indicate that the early months of 1956 will be fully as active as those of 1955.

Forecast of the Construction Division of U. S. Department of Commerce is for a new record breaking total of building put in place for 1956. The Department now expects the dollar value for 1956 to total $44 billion, five per cent above the $42 billion now practically assured for 1955.

The 1956 estimates, says the Department, are based on assumption of a moderate increase in overall economic activity. They reflect also the tremendous volume of construction now in progress, much of which will be carried over into the new year.

Employment Up

Along with expansion of output, employment in nonfarm business also has risen steadily. In addition the workweek has been somewhat lengthened resulting in higher weekly earnings which are at a peak. Unemployment is now down to about 2 million persons. Total nonfarm employment at year end will stand at not less than 50.5 million. Such a gain as this is contraseasonal since at this time of year outdoor activity such as Construction as well as certain lines of manufacturing tend to decline.

Retail Sales

Rising employment and incomes are being immediately converted into higher consumer purchases. Retail sales are running from 10 to 13 per cent above a year ago. Even the lull brought about by auto model changes failed to dent the rising trend. Auto sales this year are about 30 per cent higher than a year ago. Both new and used car inventories have been appreciably reduced. Up to now prices have been holding fairly steady but it is becoming apparent that upward pressure is beginning to be felt. Some prices including those of automobiles already have been raised slightly.

Credit Expands

Rising sales always raise questions regarding the means of financing them. In the current case is to be found steadily increasing volume of business and consumer loans.

Business loans are expanding at a rate of about a quarter billion monthly, and consumer credit is expanding at an even swifter rate. A goodly portion of business loans, in fact, are for the purpose of aiding consumer credit. Real estate and security loans are showing considerable increase. Total consumer credit now stands slightly above $35 billion, compared with $29 billion a year ago.

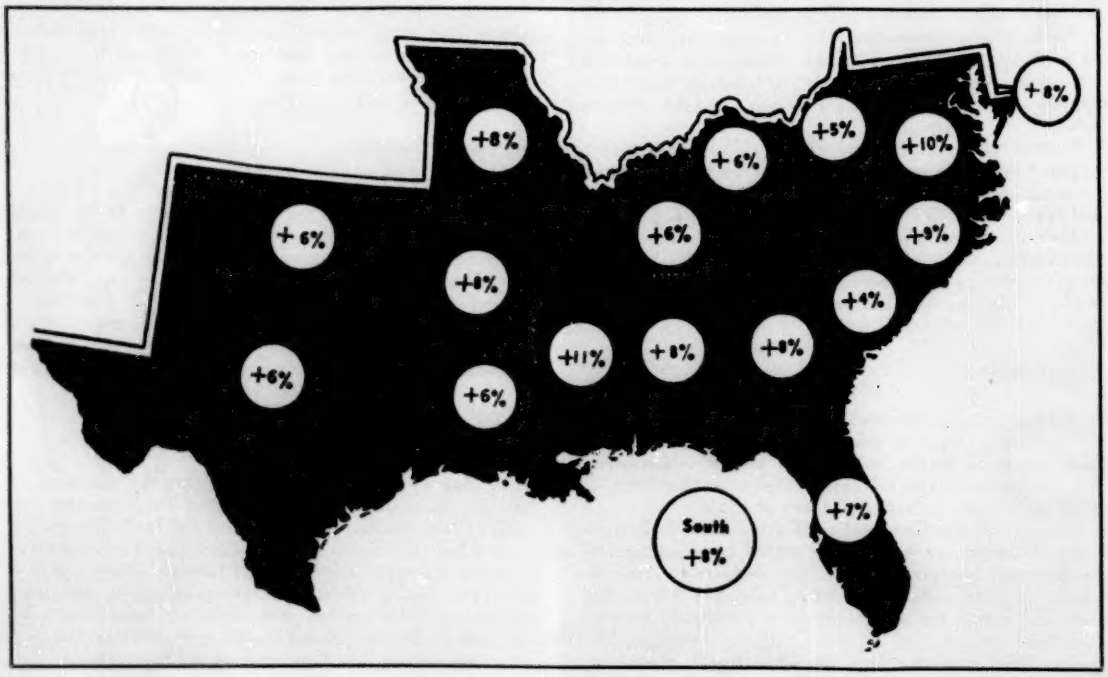
A Strong South

A year end look at the South shows the economy of the Region to be robust and growing. Total business volume for the 16 Southern states will run for 1955 not less than 8 per cent higher than for 1954. Gains are apparent in every economic sector except farming where a 5 to 6 per cent decline exists. Greatest gains are in Manufacturing and Construction, but important expansion is to be seen in Distribution also, with both Wholesaling and Retailing running 8 to 9 per cent above the previous year.

SOUTHERN BUSINESS VOLUME

Business Volume by States ($ Million)
First 9 mos. of 1955 with gain (or loss) over first 9 mos. of 1954

	Farming	*Mining*	*Construction*	*Manufacturing*	*Utilities*	*Finance*	*Wholesale Trade*	*Retail Trade*	*Service Trade*	*Business Volume*
Ala.	$ 301 —10%	$ 91 +7%	$ 375 +13%	$ 2,364 +12%	$ 319 even	$ 282 +6%	$ 1,565 +11%	$1,749 +8%	$272 +5%	$7,318 +8%
Ark.	317 —11%	90 +10%	210 +43%	783 +14%	195 +4%	110 +2%	782 +11%	1,073 +6%	135 even	3,695 +8%
D. C.	— —	— —	246 +24%	186 +3%	216 even	283 even	1,269 +7%	1,321 +13%	243 even	3,764 +8%
Fla	462 +4%	54 —8%	947 +16%	1,184 +16%	513 +3%	533 +4%	2,244 even	3,249 +11%	468 +3%	9,654 +7%
Ga.	510 —1%	28 +2%	630 +29%	3,380 +15%	455 even	399 even	2,637 +3%	2,172 +7%	410 +4%	11,621 +6%
Ky.	345 —7%	278 even	517 —12%	2,577 +16%	368 even	221 +3%	1,951 +6%	1,947 +5%	269 +2%	8,473 +6%
La.	204 —18%	763 +17%	536 —5%	2,391 +3%	525 even	300 +6%	1,984 +17%	2,001 +8%	286 +6%	8,990 +6%
Md.	196 —5%	11 +10%	665 +5%	3,206 +11%	496 +1%	439 +1%	2,625 +8%	2,448 +10%	362 +4%	10,448 +8%
Miss.	313 —17%	85 —6%	210 +24%	880 +15%	178 +3%	113 +5%	979 +7%	1,100 +18%	154 +10%	4,012 +11%
Mo.	726 —6%	86 +9%	799 +35%	4,753 +9%	845 +1%	740 +1%	6,620 +10%	3,439 +9%	676 even	18,684 +8%
N. C.	597 +13%	21 +5%	533 +6%	5,339 +11%	433 even	359 +10%	3,220 +7%	2,602 +9%	376 +1%	13,480 +9%
Okla.	330 —24%	506 +8%	361 —7%	1,540 +15%	335 +3%	247 +5%	1,671 +10%	1,704 +12%	252 even	6,946 +7%
S. C.	279 +19%	10 +5%	424 even	2,031 even	170 even	157 +5%	1,028 +8%	1,460 +5%	172 +1%	5,731 +4%
Tenn.	299 —12%	54 +9%	627 +3%	2,790 +11%	381 even	348 +3%	3,434 +5%	2,264 +8%	386 +4%	10,583 +6%
Tex.	1,161 —11%	2,533 +3%	1,902 +6%	8,517 +11%	1,498 +1%	1,205 +1%	7,999 +7%	7,488 +7%	1,198 even	33,501 +6%
Va.	320 —5%	85 +10%	692 +23%	3,476 +11%	554 +3%	443 +8%	2,027 +16%	2,451 +8%	387 +8%	10,435 +10%
W. Va.	113 even	509 +3%	216 +6%	1,385 +12%	335 +2%	135 +1%	804 +2%	1,183 +7%	172 even	4,852 +5%
South	6,473 —6%	5,204 +5%	9,890 +10%	46,782 +11%	7,816 +1%	6,314 +3%	43,839 +8%	39,651 +8%	6,218 +2%	172,187 +8%

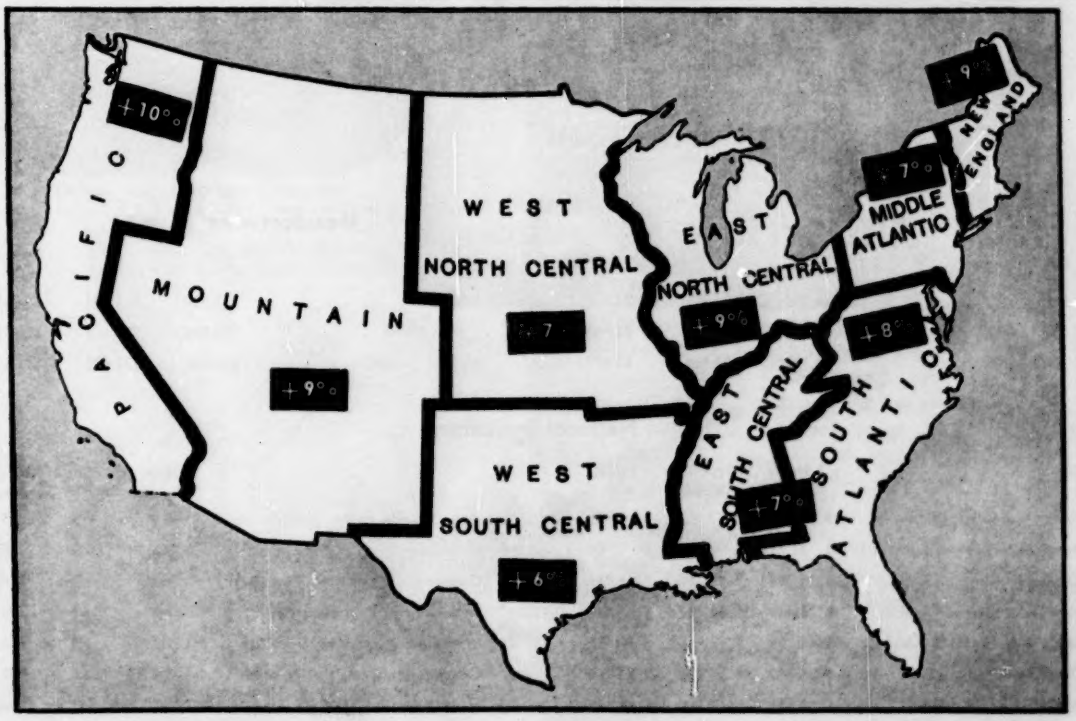


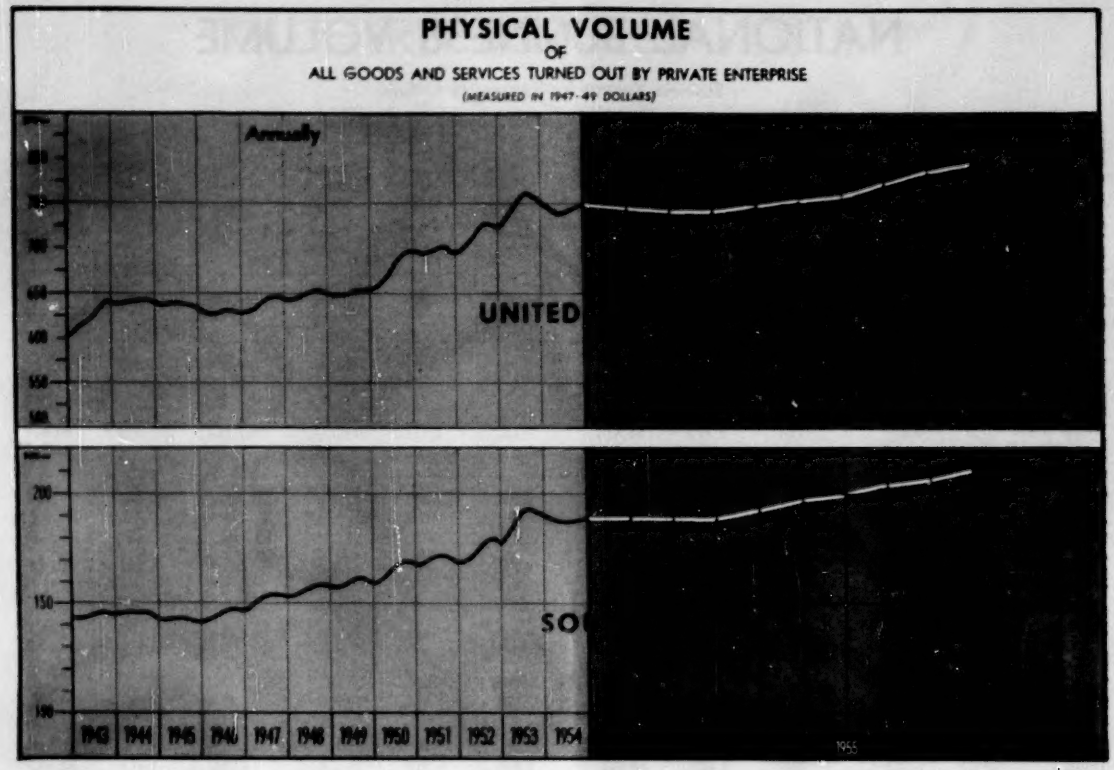
NATIONAL BUSINESS VOLUME

Business Volume by Regions ($ Million)

First 9 mos. of 1955 with gain (or loss) over first 9 mos. of 1954

	Farming	*Mining*	*Construction*	*Manufacturing*	*Utilities*	*Finance*	*Wholesale Trade*	*Retail Trade*	*Service Trade*	*Business Volume*
New Eng.	$ 590 +6%	$ 45 +11%	$ 1,878 +24%	$ 14,316 +9%	$ 1,431 +1%	$ 1,944 +4%	$ 8,365 +12%	$ 9,195 +7%	$ 1,517 +3%	$ 39,281 +9%
Mid. Atl.	1,502 even	663 even	5,963 +11%	48,442 +8%	6,323 even	7,405 +1%	51,966 +7%	26,885 +8%	7,054 +2%	156,203 +7%
E. N. Cen.	4,166 —6%	689 +5%	6,176 +12%	64,410 +13%	5,701 +3%	5,072 +3%	40,226 +6%	29,579 +8%	5,542 +1%	161,561 +9%
W. N. Cen.	5,336 —5%	774 +1%	2,772 +24%	15,434 +8%	2,687 +1%	2,136 +2%	19,774 +9%	12,767 +9%	1,943 +1%	63,623 +7%
S. Atl.	2,555 +4%	718 even	4,490 +13%	20,776 +11%	3,244 +1%	2,811 +3%	17,211 +6%	17,272 +9%	2,650 +3%	71,727 +8%
E. S. Cen.	1,258 —12%	508 even	1,729 +2%	8,611 +13%	1,246 even	964 +4%	7,929 +8%	7,060 +9%	1,081 +5%	30,386 +7%
W. S. Cen.	2,012 —15%	3,892 +6%	3,009 +4%	13,231 +10%	2,553 +1%	1,862 +2%	12,436 +9%	12,266 +8%	1,871 even	53,132 +6%
Mount.	1,199 —8%	1,132 +8%	1,192 +14%	3,428 +15%	1,117 +2%	671 +7%	4,342 +11%	4,836 +10%	783 +4%	18,700 +9%
Pacif.	2,347 even	997 +5%	3,849 +19%	20,785 +15%	2,990 +2%	2,771 +5%	16,419 +8%	14,643 +9%	3,311 +1%	68,112 +10%
U. S.	20,965 —5%	9,418 +4%	31,058 +13%	209,433 +11%	27,292 +1%	25,636 +3%	178,668 +7%	134,503 +8%	25,752 +2%	662,725 +8%





(*Continued from page* 11)

Regional Indicators

Farm Marketings ($ Mil.)

	Sep. 1955	*Aug. 1955*	*Sep. 1954*
South	$1,151	$ 784	$1,189
Other States	$1,903	$1,804	$1,957
United States	$3,054	$2,588	$3,146

Mineral Output ($ Mil.)

	Sep. 1955	*Aug. 1955*	*Sep. 1954*
South	$ 620	$ 607	$ 544
Other States	$ 504	$ 483	$ 436
United States	$1,124	$1,090	$ 980

Construction ($ Mil.)

	Sep. 1955	*Aug. 1955*	*Sep. 1954*
South	$1,264	$1,207	$1,154
Other States	$2,889	$2,759	$2,463
United States	$4,153	$3,966	$3,617

Manufacturing ($ Mil.)

	Sep. 1955	*Aug. 1955*	*Sep. 1954*
South	$ 5,920	$ 5,693	$ 4,654
Other States	$20,986	$20,179	$15,971
United States	$26,906	$25,872	$20,625

National Indicators

	Latest Month	*Previous Month*	*Year Ago*
Personal Income ($ Bil.)	$ 307.5	$ 305.3	$ 287.9
Avg. Weekly Earnings (Mfg.)	$ 77.71	$ 76.33	$ 71.86
Consumer Credit ($ Mil.)	$ 34,293	$ 33,636	$ 28,856
New Mfg. Orders ($ Mil.)	$ 28,644	$ 28,443	$ 23,817
Mfg. Inventories ($ Mil.)	$ 44,186	$ 43,945	$ 42,639
Trade Inventories ($ Mil.)	$ 35,450	$ 34,950	$ 34,250
Bank Debits ($ Mil.)	$169,001	$167,365	$149,898

	Latest Month	*Previous Month*	*Year Ago*
Avg. Weekly Hours (Mfg.)	40.9	40.6	39.7
Carloadings	3,142	3,114	2,708
Consumer Prices ('47-'49=100)	114.9	114.5	114.7
Retail Prices ('35-'39=100)	208.8	208.1	208.2
Wholesale Prices ('47-'49=100)	111.7	110.9	110.0
Construction Costs ('47-'49=100)	126.5	126.2	122.1
Electric Output (mil. kw. hrs.)	52,907	55,917	45,489

ROLLING STEEL FOR HOME BUILDING... AT Newport Steel

PRODUCTS OF NEWPORT STEEL

- Cold-Rolled Sheets
- Hot-Rolled Steel in Coil
- Hot-Rolled Pickled Steel in Coil
- Hot-Rolled Sheets
- Hot-Rolled Pickled Sheets
- Galvanized Sheets
- Galvannealed Sheets
- Colorbond Sheets
- Electrical Sheets

Capable hands of long experience guide Newport steel products through the mill and out to leading manufacturers of equipment for the home. Careful buyers find in Newport the most effective combination of modern facilities, steelmaking experience, conscientious personnel, strict adherence to precise specifications, and strategic location at the heart of the nation's fastest growing industrial area. These qualities make Newport the most dependable source for your requirements of the steel products listed here.

- Alloy Sheets and Plates
- Electric Weld Line Pipe
- Roofing and Siding
- Eave Trough and Conductor Pipe
- Culverts

ECONOMICAL WATERAIL-TRUCK DELIVERY

Newport Steel is ideally situated on the Mississippi-Ohio River system and the great Cincinnati rail-truck hub. New barge facilities, 7 major railroads and 143 motor carriers enable Newport to give economical, dependable delivery to the entire area of the Middle West and South.

Newport Steel

CORPORATION

NEWPORT, KENTUCKY

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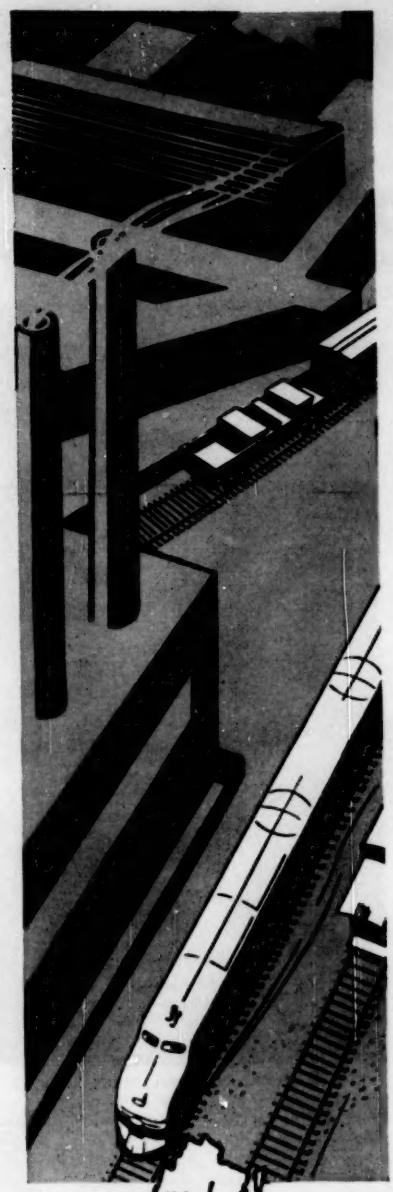
THE PROFIT ZONE



The territory comprising the Seaboard Southeast is highly favorable to profitable industrial operations. Industrial development in this area in recent years has been nothing short of startling.

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We have on file descriptions of numerous plant sites large and small. An expression of your requirements will bring specific recommendations and detailed data. Inquiries confidential, of course.

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Warren T. White
Assistant Vice President
Seaboard Air Line Railroad Company
Norfolk 10, Virginia

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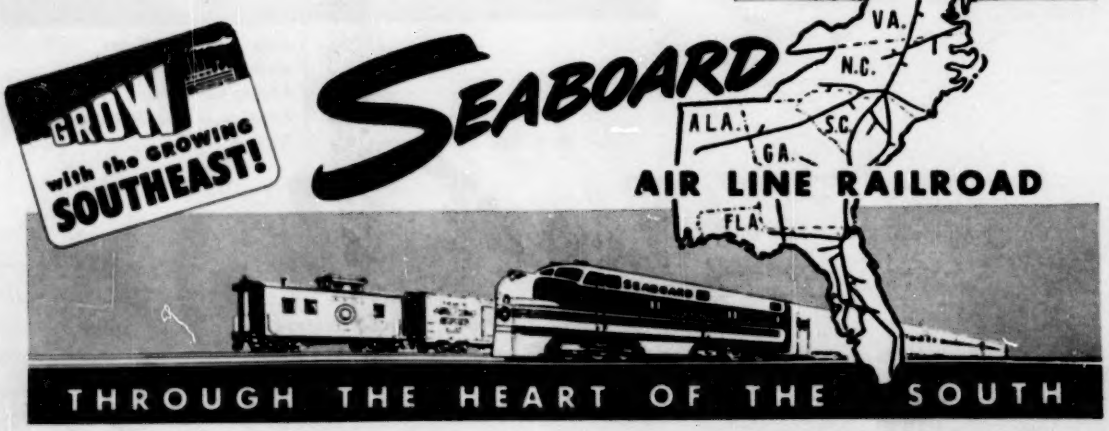

THROUGH THE HEART OF THE SOUTH

NEW AND EXPANDING PLANTS

ALABAMA

TUSCALOOSA—The Dairy Builders, Inc., received bids for dairy plant on 17th St. between 7th & 8th Sts. Don Buel Schuyler, 2429 E. 15th St., Archt.

TUSCALOOSA — Delview Dairy received bid from Adams & Baker, First National Bank Bldg., at $132,700 for dairy plant. Don B. Scnuyler, Archt.

ARKANSAS

CONWAY—Virco Mfg. Co., Conway, plans new building for manufacture of school furniture.

EL DORADO—Murphey Corp. of El Dorado and Michigan Chemical Co., St. Louis, Mo., to construct, jointly, a $1,000,000 plant to produce bromine from Smackover Oil District brine.

HATFIELD—Byron Perkins & H. E. Haney to erect plant to produce sorghum syrup.

LITTLE ROCK—Hoerner Boxes, Inc., Keokuk, Iowa, to build $500,000 plant for manufacture of corrugated paper board.

McGEHEE & DERMOTT—Wells Lamont Corp., Chicago, work gloves manufacturer, plans establishment of glove factory on site half-way between McGehee & Dermott.

NETTLETON — Lambert Seed Co., Newport, Ark., plans large cotton seed de-linting plant.

PARAGOULD — Greene County Industrial Development Corp. to erect $350,000 plant building to be leased to Emerson Electric Co., St. Louis, Mo., for production of small motors.

PINE BLUFF—Dierks Forests, Inc., Mountain Pine, plans multi-million-dollar Kraft paper mill.

ROGERS—Speas Company razing old plant and plans $300,000 new facilities for vinegar distillation.

TEXARKANA — Texarkana Industrial Foundation to erect building for lease to Woodlin, Inc., manufacturer of aluminum products.

FLORIDA

CORAL GABLES—S. M. Boddington plans commercial building on Almeria Ave. Leroy K. Albert, 269 Giraloa Ave., Archt.

FT. MYERS — John O. Zipperer received bids for cold storage warehouse. Martin G. Gunderson & Edgar A. Ilson, 2312 First St., Ft. Myers, Archts.

HIALEAH—Bader Bros. Holding Corp. let contract to Arnold Construction Co., 4757 N.W. 2nd Ave., Miami, for warehouse addition, 4499 E. 10th Court.

HIALEAH—Elson Bros. Development Corp. 1781 S.W. 21st St., Miami, let contract to Elson Homes, Inc., Miami, for warehouse, 1065-75-85-95 E. 30th St. R. J. Schneider, Hialeah, Archt.

HIALEAH — Sommerstein Land Co., Inc., 3650 N.W. 50th St., Hialeah, let contract to Spector & Sons, 575 S.W. 22nd Ave., Miami, at $175,000 for factory building, 3650 N.W. 50th St. B. Robert Swartburg, 126—24th St., Miami Beach, Archt.

MIAMI—Lo Worth Crow Co., 55 S.W. 8th St., let contract to Babcock Co., 2960 Coral Way, Miami, for addition to office building, 51 S.W. 8th St.

MIAMI — Wilmo Company let contract to Escher Constr. Co., Inc., 891 S.E. 2nd Place, Hialeah, at $228,000 for office building at 158 N.E. 4th St., Miami. Weed-Russell-Johnson Assocs., 550 Brickell Ave., Miami, Archts.

PALATKA — Hudson Pulp & Paper Corp. plan newsprint plant estimated to cost $25,000,000.

PORT ST. JOE—Glidden Co., Cleveland, Ohio, plans to build chemical plant.

GEORGIA

ABBEVILLE—Abbeville Mfg. Co. plans to construct plant to manufacture children's clothes.

ATLANTA—L. & N. Railroad plans $8,000,000 yard improvements.

ATLANTA — Southern Bell Telephone & Telegraph Co. plans additions in Georgia totaling $490,000,000.

ATLANTA — Southern Cotton Oil Co. received bids for alterations and additions to sales office building and sales warehouse building for Blue Plate Foods, Inc. August Perez & Assocs., Audubon Bldg., New Orleans, La., Archts.

BAINBRIDGE—Rhea Mfg. Co. to construct $48,000 addition to women's apparel plant.

BOWMAN — Wright Garment Co. plans $70,000 building addition.

CORDELE — Spa Waste Co. to construct plant for processing industrial waste.

JASPER — Nunnally & McCrea Co., 98 Mitchell St., S.W., Atlanta, plans clothing factory. Hal W. Greer, 254 E. Paces Ferry Rd., N.E., Atlanta, Archt.

LaGRANGE—Ideal Laundry received bids for laundry building. T. Firth Lockwood, Box 34, Columbus, Ga., Archt.

MT. VERNON—Mt. Vernon Mfg. Co. plans needletrade plant building, to cost $113,000.

ROME — Hardy Trust Co. let contract to Johnson & Johnson Constr. Co., Box 1387, for building for Em. H. & Emory L. Ford, owners, to be leased to Firestone Tire & Rubber Co., Rome, Ga.

LOUISIANA

BATON ROUGE — Continental Southern Lines, Inc., let contract to Buquet & LeBlanc, Box 4596, Baton Rouge, for bus station bldg., North Blvd. and St. Philip St.

BATON ROUGE—Esso Standard Oil Co., La. Div., Baton Rouge, received bids for addition to Esso laboratories. Voorhees, Walker, Smith & Smith, 101 Park Ave., New York 17, Archts.

BOSSIER CITY—Rickey Brocato received bid from Ed Brockhaus, Box 3325, Q. B. Station, Shreveport, La., at $59,187 for laundry building at 811 Traffic St. Louis E. Moossy, 339 Ricou-Brewster Bldg., Shreveport, Archt.

JEFFERSON PARISH—New Orleans Cold Storage & Warehouse Co. received bids for cold storage and warehouse building. August Perez & Assocs., 314 Audubon Bldg., New Orleans, Archts.

LAFAYETTE—L. A. Frey & Sons, Inc., plan addition to packing plant in East City limits of Lafayette. W. F. Bowen and D. J. O'Rourke & Eugenia Morse, Assocs., 314 S. Buchanan St., Archt.

LAKE CHARLES—Lone Star Cement Co. let contract to Wals Constr. Co. of New York and F. Milier & Sons, Inc., Box 921, Lake Charles, for cement plant.

NEW ORLEANS—Baroid Sales Division of National Lead Co., Richards Bldg., let contract to Keller Constr. Corp., 7900 Palm St., at $202,178 for new wharf foundation for warehouse building at Industrial Canal Turning Basin.

NEW ORLEANS—Bryce E. Dresseis & Co., 2211 Canal St., received bids for sales, service and warehouse building, 7000 Washington Ave. Robert Cummins, 315 Maritime Bldg., Archt.

NEW ORLEANS—Flintkote Co., 4500 N. Galvez St., received bids for replacement building, to be placed over another existing building at New Orleans plant.

NEW ORLEANS—Royal Carpet Cleaning Co. let contract to E. B. Ludwig Constr. Co., 901 Jefferson Highway, for new plant at 3620 Robertson St., Jefferson Parish, E. B. Ludwig, 903 Jefferson Highway, New Orleans, Archt.

NEW ORLEANS—Standard Brands, Inc., 5500 Chef Menteur Highway, received bids for addition to warehouse building.

OAK GROVE—Northeast-Louisiana Power Co-operative received bids for office building. Allen T. Turpin, 414 Louisville Ave., Monroe, La., Archt.

RAYVILLE — Mayor of Rayville received bid from W. C. Salley, Box 24, Monroe, La., at $148,675 for new industrial building. Rivers & Heuer, Ouachita National Bank Bldg., Monroe, La., Archts.

New and Expanding Plants Reported in November 1955
92
First Eleven Months of 1955
1,150
First Eleven Months of 1954
1.251

MARYLAND

BALTIMORE—American Radiator & Standard Sanitary Corp. let contract to Baltimore Contractors, Inc., 711 S. Central Ave., Baltimore 2, at $52,000, for laboratory cupolas, 5005 Holabird Ave.

BALTIMORE—Baltimore & Ohio Railroad let contract to Lacchi Constr. Co., 2023 Maryland Ave., for restaurant bldg.

BALTIMORE—Baltimore & Ohio R.R. let contract to Steiner Const. Co., Inc., 2122 Maryland Ave., for office building, Locust Point, Engineering Dept. Engr. 11-26.

BALTIMORE—B. & O. Railroad, Engineering Dept., received bids for office and storage building at Yard B, Mt. Clare Shops.

BALTIMORE—Baugh Chemical Co., P. J. Prosser, president, 25 S. Calvert St.—plant at Clinton St. & Mertens Ave.—plan new administration building.

BALTIMORE—C. & P. Telephone Co., Telephone Bldg., received bids for Catonsville dial center, 14 Bloomsbury Ave. Taylor & Fisher, 103 W. Hamilton St., Archts.

BALTIMORE—The Elite Laundry let contract to Colwill Constr. Co., Inc., 2114 Maryland Ave., Baltimore 18, at $59,500 for addition to laundry, 1920 Clifton Ave. Jamison & Marcks, 8 E. Mulberry St., Archts.

BALTIMORE — The Harkins Corp. plans office, 204 St. Paul St. Tyler, Ketcham & Myers, 513 Park Ave., Archts.

BALTIMORE—Henry A. Knott, 2406 Greenmount Ave., Baltimore 18, plans warehouse at 2301 Gwynns Falls Parkway, estimated to cost $110,000.

BALTIMORE—Meadow Gold Ice Cream Co., 1726 E. Pratt St., received bids for cold room. David Harrison, 2129 St. Paul St., Baltimore 18, Archt.

BALTIMORE—Western Electric Co., 2500 Broening Highway, let contract to Consolidated Engineering Co., 20 E. Franklin St., Baltimore 2, at $145,000 for alterations to manufacturing building.

DORSEY—Baltimore Aircoil Co., Inc., John Engalitcheff, Jr., president, 2635 Mathews St., Baltimore, plans to construct new plant on 20 acres of land on Montevideo Rd. & B. & O. R.R. near Dorsey. Howard County.

SILVER SPRING—Vitro Laboratories, a division of Vitro Corporation of America, New York, to build $1,000,000 laboratory near Silver Spring. J. Carlton Ward, Jr., president.

NORTH CAROLINA

ACME—Riegel Carolina Corp. let contract to McKoy Helgerson Co., Greenville, S. C., for Phase 2—plant expansion.

CHARLOTTE — Campbell's Cleaners received bids for building. R. Edwin Wilson, Arcnt.

CHARLOTTE—Fleming Specialty Co. let contract to Goode Constr. Co. at $42,400 for warehouse. James A. Malcolm, Archt.

GASTONIA—Rex Mills, Inc., Gastonia, received bids for addition to mill building. Robert & Co., Assocs., 96 Poplar St., N.W., Atlanta, Ga., Archts.-Engrs.

RED SPRINGS — Lumbee River Electric Membership Corp. received bid of $84,006 from D. R. Allen & Son, Fayetteville, for alterations and additions to headquarters building.

SALISBURY—American Moistening Co., Providence, R. I., to construct plant on 100-acre tract at Cleveland, near Salisbury.

OKLAHOMA

TULSA—Hercules Portland Cement Co., Inc., a newly formed company, plans $2,000,000 cement plant in Mayes County, Okla., near Tulsa.

(Continued on next page)

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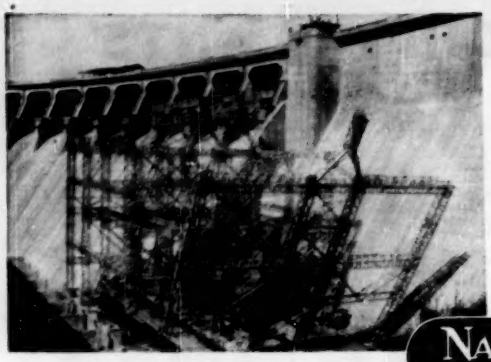

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NASHVILLE BRIDGE COMPANY
NASHVILLE, TENN. — BESSEMER, ALA.

NEW AND EXPANDING PLANTS

(*Continued from Page* 15)

SOUTH CAROLINA

SOUTH CAROLINA—Chesnee Telephone Company received bids for Proj. SC 515 Chesnee.

CHARLESTON — Professional Bldg., Inc., received bid from Ruscon Constr. Co. at $385,100 for professional building, Ashley Ave. & Bull St., Augustus E. Constantine, Charleston, Archt.

CHESNEE — Chesnee Telephone Co. plans rural telephone project, known as Proj. S.C. 515, Chesnee.

GREENVILLE — The McPherson Co. received bid from G. M. Cox & Co. at $66,901 for additions and alterations to building.

SPARTANBURG — Kohler Co., manufacturers of plumbing fixtures, Herbert V. Kohler, pres., Kohler, Wis., plans pottery plant; estimated cost $5,000,000.

TENNESSEE

KNOXVILLE—Cloverleaf Corp. let contract to Decker & Merryman, Box 5233, Fountain City, Tenn., for office building, Lindsay & Maples, 237 Daylight Bldg., Knoxville, Archts.

KNOXVILLE — Gulf Refining Co. plans $100,000 pipeline distribution terminal.

MEMPHIS—Delta Chemical let contract to Fred Young for factory and warehouse, Hall & Norton, Archts.

MEMPHIS—F. L. Saino Mfg. Co. received bids for warehouse and office building, Wiseman & Bland, Archts.

NASHVILLE—Board of Publication of the Methodist Church, Inc., Nashville, let contract to W. F. Holt & Sons, 1119 Laurel St., for office building, Hart, Freeland & Roberts, 928 Third National Bank Bldg., Archts.

TEXAS

ABILENE—Borden Milk Co., c/o Sam Hill, Manager, Abilene, plans milk plant to cost approx. $350,000.

AUSTIN—Austin Meat Co., c/o Raymond & Marvin Knippa, 5th & Allen Sts., plan to construct plant. Fehr & Granger, 502 E. 5th St., Austin, Archts.

BELTON — Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, let contract to Ed Johnson, Box 424, Waco, for Webster "9" dial building, N. Main St.

BIG SPRING — Big Spring Herald plans newspaper plant, Donald R. Goss, 707 McBurnett Bldg., San Angelo, Archt.

BIG SPRING — Cosden Petroleum Corp. plans $120,000 administration building, Benson, Thompson & Nash, 302 W. 12th St., Big Spring, Archts.

CORPUS CHRISTI—Landsman Realty Co., Richard M. Landsman, president, received bids for community center, 4200 block S. Alameda St. K. Alexander, 136 E. Elmview Place, San Antonio, Archt.

DALLAS—Carrier Corp., Syracuse, N. Y., let contract to J. E. Morgan & Sons, Dallas, for modern office building to house district headquarters for its Machinery & Systems & Unitary Equipment Divisions, cor. North Central Expressway & Manderville Road. Cloud Wampler, president of Carrier Corp. George H. Dahl, Dallas, Archt.

DALLAS—Daltex Optical Co., 1400 Dragon St., received bid from Fairway Constr. Co., 4528 Fairway St., at $275,000 for optical building. J. N. McCammon, Meadows Bldg., Archt.

DALLAS—Dukaine Corp., 119 W. Fifth St., Austin, let contract to Winston A. Colwell, 6025 Dyer St., Dallas, at $40,940 for new building at 9335 Gaston Parkway. George W. Edwards, 1509-A Cochran St., Dallas, Archt.

DALLAS—Powell Printing Co., 1608 Wood St., received bid from Chas. S. Munn Construction Co., 5319 Junius St., at $76,627 for graphic arts building. Thomas, Jameson & Merrill, 820 E. Harwood St., Archts.

DALLAS—United Warehouse, Inc., 2815 Main St., received bid from Schwarz Constr. Co., 1608 Browder St., at $95,982 for warehouse building.

EL PASO — Mountain States Telephone & Telegraph Co., El Paso, let contract to C. R. Bagwell, 2115 E. Missouri St., at $100,000 for building remodeling. Monroe, Light & Riggins, 827 E. Yandell Blvd., El Paso, Archts.

FORT WORTH—T. W. Painter, Wilcox Jet Services, Inc., plans warehouse at 1400 E. Berry St. Wilson & Patterson & Assocs., 601 Bailey St., Fort Worth, Archts.

FORT WORTH—Southwest Bell Telephone Co., 308 S. Akard St., Dallas, received bids fo. central storage room and garage addition.

HONDO—Medina Electric Corp., Inc., plans war house and office building. R. M. Ayres, 342 W. Woodlawn Ave., Laurel Heights Station, San Antonio, Archts.

HOUSTON—Joskes Div. of Allied Stores, 401 Fifth Ave., New York, let contract to Geo. A. Fuller Co., Gibraltar Life Bldg., Dallas, for warehouse on Mykawa Road. Bartlett Cocke, 3501 Broadway, San Antonio, Archt.

HOUSTON—Crockett Properties, Inc., received bid from Cando Constr. Co., Box 14226, at $232,000 for office building and industria. plant, S.W. cor. 12th St. & Ella Dr. J. Hayle Smyth, 2422 Rice Blvd., Archt.

HOUSTON—Houston Lighting & Power Co. let contract to American Constr. Co. at $232,833 for Katy Road Service Center, 10310 Old Katy Road.

HOUSTON—Owl Foto Service, 2208 Brazos St., let contract to Rose Constructors, 9100 Memorial Dr., at $51,630 for addition to building. Allen Heidbreder, S. Coast Life Bldg., Archt.

HOUSTON—Pittsburgh Plate Glass Co., 7201 Liberty Road, Houston, let contract to Manhattan Constr. Co., 1811 Crawford St., at $71,368 for factory building addition, 7201 Liberty Road. Maurice & Charles F. Sullivan, 3901 Travis St., Archts.

HOUSTON—Schlumberger Well Surveying Corp. let contract to The Austin Co., 1000 M & M Bldg. at approx. $89,000 for warehouse 5000 Gulf Freeway.

HOUSTON—Triangle Refineries, Inc., received bids for office building addition, 2600 Nottingham. W. F. Wisdom, 1315 Bell Ave., Houston, Archts.

IRVING—Lone Star Gas Co., Jackson & Harwood Sts., Dallas, let contract to Noel Smith, 207 E. Chambers, Cleburne, for building. Smith & Warder, 405 W. Jefferson, Grand Prairie, Archt.

KILLEEN—Mid-Texas Telephone Co. received bid from Ed Johnson, Box 424, Waco, at $141,894 for dial building—REA Proj. 597-A, San Antonio.

MARFA—Southwestern Bell Telephone Co.

(*Continued on page* 61)

TRINITY INDUSTRIAL DISTRICT

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"The St. Petersburg area is classified as a Class III area by the Bureau of Labor Statistics, meaning that a surplus of qualified workers in every category can be found here. Our active file numbers approximately 4,000 qualified workers seeking employment through this office within the past 30 days; the new applicants seeking the advantages of living in St. Petersburg number well over 1,000 per month for the last 18 months; and approximately 500 high school students entering the labor market each year."

Robert C. Simmons, Local Office Manager
FLORIDA STATE EMPLOYMENT SERVICE

ALLSTATE INSURANCE COMPANY

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CLIMATE and LOCATION

2,600 new residents move to Florida each week knowing they will live happier, healthier lives. In St. Petersburg the sun shines not less than 350 days a year. With unsurpassed wholesome recreational facilities, it is truly a city in which work and play are profitably combined.

"I have personally flown over these entire United States and have found no place that, from my plane, looks more beautiful than St. Petersburg, or that offers more combined advantages for working and living. This climate provides our employees with opportunity to enjoy a better balance between work and play. Most of us are hard core lovers of sun and recreation. Why not build the plant in a climate where our employees can spend their non-working hours in healthful relaxation and play?

We have also carefully investigated the elements of cost and climate for business growth. Our purchasing agent visited here for approximately one month, and submitted a most comprehensive report covering his findings. While potential suppliers are not as plentiful as they are in our Philadelphia area, we could find no serious obstacles from the standpoint of supply."

R. T. Sheen, President
MILTON-ROY COMPANY

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"One of the most important reasons we decided on St. Petersburg, was the genuine interest on the part of everyone plus the zeal of your Chamber of Commerce to have Allstate move into this very attractive and prospering community.

The business factors which influenced our choice of St. Petersburg included central location, fine transportation, the bright prospects for a continuing well-balanced increase in industrial and commercial growth, excellent school, church and shopping facilities, and the numerous recreational and cultural activities available."

Judson C. Branch, Senior Vice President
ALLSTATE INSURANCE COMPANY

ST. PETERSBURG CHAMBER OF COMMERCE

JACK BRYAN, Industrial Director
ST. PETERSBURG • FLORIDA

WRITE FOR COMPLETE INFORMATION AND INDUSTRIAL BROCHURE

LITTLE GRAINS OF SAND

"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."

Fruitful Savings? It is obvious, in retrospect, that the man who, in 1940, put $10,000 in U. S. Savings Bonds was worse off in 1950, when he cashed in his bonds, than he was when he made the investment. It was not that the contract governing the repayment of the bonds with accumulated interest of about 3% had been violated. It was that the dollar lost purchasing power in excess of the interest paid on the bonds.

Now if the conviction gains ground that the dollar, as a result of wage and fringe demands in highly unionized industries, high farm supports and tariff protection, will buy less and less, the public attitude toward saving through life insurance, old age retirement schemes and deposits in savings banks will some day undergo a change—with unhappy consequences for a privately-owned economy largely financed by small savers.

Security for everyone could become security for no one. Inflation may not be a necessary consequence of full employment; but a combination of full employment, monopolistic union power, comprehensive social security and Government handouts for other sectors of the economy certainly builds up inflationary pressures.

Tax Ceiling. Drive for a ceiling on Federal income taxes picks up speed.

The Western Tax Council, formed in 1939 for the sole purpose of getting an amendment to the Constitution which would place a 25% ceiling on Federal rates, is readying a drive for needed additional support. Frank Packard, executive vice president of the 8,000-member W.T.C., claims 30 state legislatures have already approved proposals requesting Congress to submit such an amendment to the states for ratification. When 32 states ask Congress for an amendment, the proposal has to be submitted to all states, with three-fourths of them needed for acceptance.

The Arizona legislature is the likeliest present prospect for favorable action, according to Mr. Packard, with other possibilities including Colorado, South Carolina and New York. So far this year Oklahoma has been the only state to ask Congress for the amendment.

The Treasury strongly opposes a ceiling. "With the world situation as it is you can't make tax cuts or impose limitations that would jeoparidze our defense," says an official.

> The man who pretends to know all of the answers must expect to be laughed at by one who knows some of them.

Far from Harmful. The New Orleans Chamber of Commerce News Bulletin recently took a reappraising look at Louisiana's right to work law.

The purpose of an editorial, "Right-to-Work Law Epilogue," was to examine effects of the law since it became effective July 28, 1954, and to try to determine whether the fears expressed by those who had opposed its passage had come to pass. The opponents had predicted more unemployment, lower pay and an economic decline in the state.

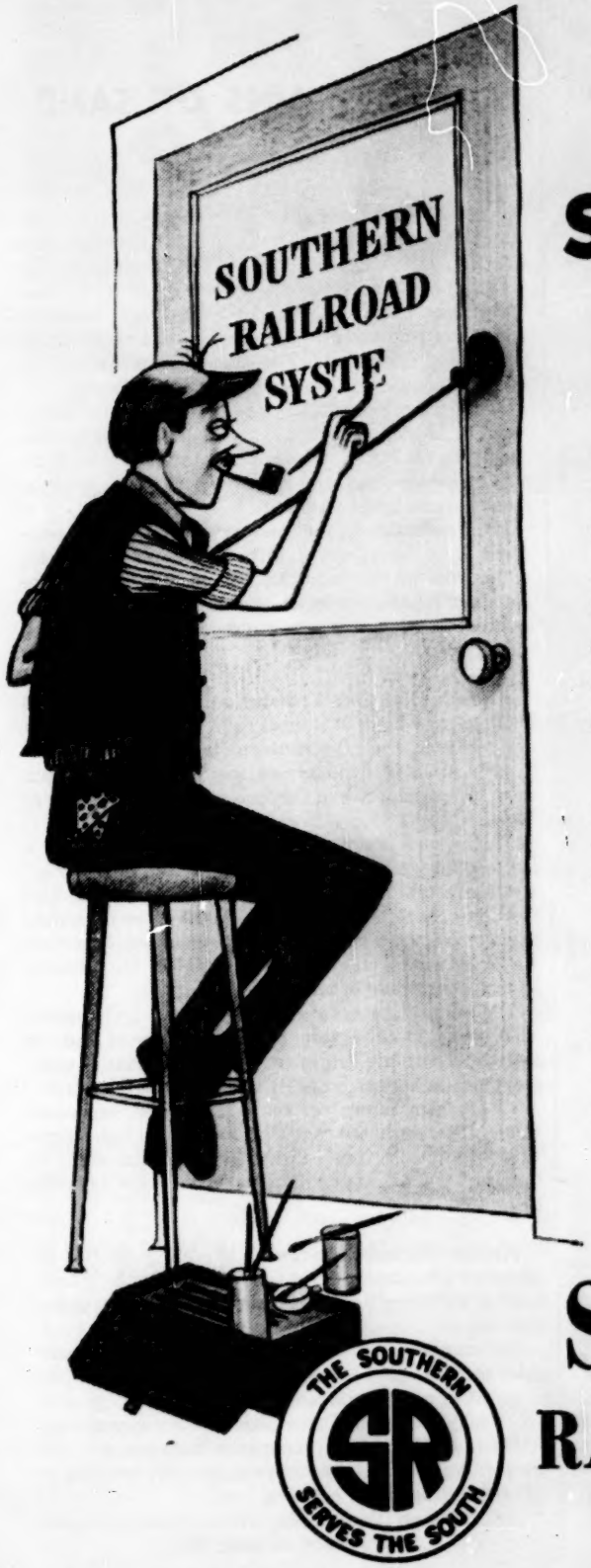
The News Bulletin, among other things, reported: Average hourly wages have increased from $1.58 to $1.67. Average weekly wages have increased $4.58. Non-agricultural employment in Louisiana has grown from 695,800 in September, 1954, to 699,600 in 1955.

Summing up the situation in much less emotional terms than opponents of the law previously expressed themselves, the Chamber bulletin concluded:

"While it is not to be inferred that these improvements are the result of our 'Right-to-Work' law, they should allay the fears of those who said they expected more unemployment, lower pay and the economic decline of our state to follow its enactment."

The experience of Louisiana under the law should refute the arguments of those who contend that guaranteeing the right to work to all individuals invites calamity.

(*Continued on page* 20)



SOMEBODY GOOFED!

IT'S A COMMON MISTAKE but certainly the sign painter should know better. The word "RAILROAD" should be "RAILWAY," for our correct name is Southern Railway System. Yet it's surprising how many of our good friends and neighbors refer to us as Southern Railroad System.

Not that it really matters. *Railroad* or *Railway*, we're still the Southern that "serves the South" —not only as an agency of transportation, but as a job provider, taxpayer and customer, too.

And because what you *say* about us—not what you *call* us—is what counts, we'll go right on doing everything we can to make you pleased with and proud of the railway that means so much to all who live and work in the Southland. Make no mistake about that!

Harry A. DeButts
President

SOUTHERN RAILWAY SYSTEM

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LITTLE GRAINS OF SAND

(*Continued from page* 18)

Automation. During the depression of the thirties, many economists, taking a static view of things, held that our technological frontiers had substantially vanished. Stagnation theories were the order of the day. They spun out at length the urgent new measures which must be taken to lift consumption, to fill in for investment opportunities which no longer existed; in short, to counteract the deadly economic anemia.

Today we are caught in the opposite fear. Consumption is held likely to falter because automatic machines do not go shopping around. The urgency is now for a host of new measures to counteract the impact of our latest technological outburst.

If automation is the vast revolution which some claim it to be, it ought to be welcomed with noisy hallelujahs as the definitive nail in the coffin of the defeatist theories, instead of with anxieties at least as great as when it was considered technology was no longer with us.

Investigation and Legislation. The Congressional right to investigate is a legal right in the sense that it derives from the Congressional lawmaking function. The question immediately arises, What has Communism in the theatre, or in unions, or in education, got to do with the making of laws?

The answer is not that Congress will likely pass a law dealing specifically with Communism in the theatre as a result of a committee inquiry. It is, rather, that for Congress to be able to pass sensible laws regarding the Communist conspiracy in this country, it is well for Congress to take, as far as possible, the measure of that conspiracy in all its manifestations.

The connection between investigation and legislation evokes little protest in other matters of Federal interest. There are few outcries that Congress is overstepping its bounds when it looks into business mergers or farm prices or, for that matter, organized crime. If it is granted that the Government has a right to protect itself from subversion, then the right of Congress to investigate Communism cannot logically be limited.

Higher Farmers' Income. There's a pretty determined effort afoot to convince the farmer he's doing a lot of suffering because of the flexible price support system.

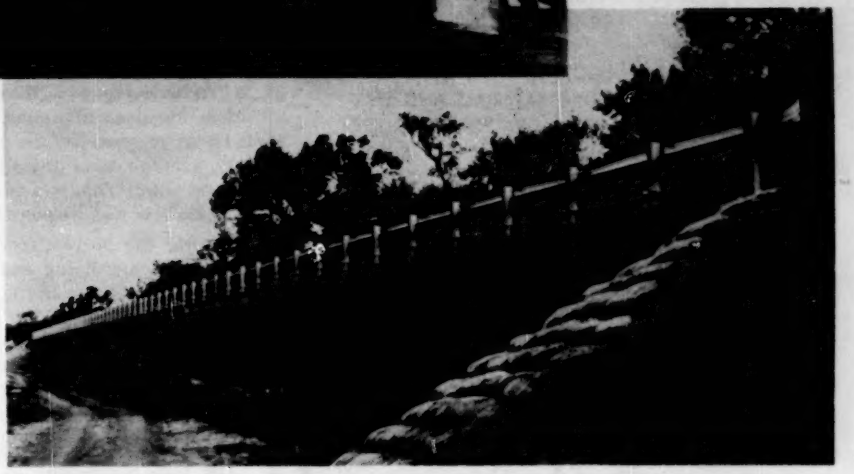
The campaigners are spreading about the countryside, in vast numbers, a delayed-action statistic due to go off in next year's election.

So, maybe it would be a good idea to appraise the statistic. Like all good propaganda material, it's very simple: Since 1947, the campaigners say, over-all income has dropped 30 per cent.

Unfortunately, the campaigners are underestimating

(*Continued on page* 22)

Safety-Beam guard rail used on approach span and bridge in Conway County, Arkansas. The beam protects bridge members as well as motorists.



Safety-Beam used with steel guard posts on trestle bridge in Georgia. A wider roadway was obtained by attaching guard posts to concrete blocks outside the bridge proper.

Many rural bridges given Safety-Beam protection

Safety-Beam, Bethlehem's strong yet light-weight beam guard rail, is giving effective protection to motorists on many rural highway bridges. Safety-Beam is well-suited to this use for the following reasons:

PERMITS WIDER ROADWAYS—Replacing bulky concrete or wooden railings with Safety-Beam guard rail makes a narrow bridge roadway wider and safer. On beam bridges, posts may be attached to the edge of the roadway slab, making the entire bridge width available for traffic.

PROTECTS TRUSS MEMBERS — In through-truss bridges, Safety-Beam offers protection to the main members of the truss from the impact of heavy vehicles. And because Safety-Beam guard rail occupies so little space, there is no material reduction in the width of the roadway.

LIGHT IN WEIGHT—The fact that Safety-Beam weighs so little in comparison with other types of rail of equal strength means less weight for bridge structures to support.

PROVIDES SAFE APPROACH—A safe approach to bridges is provided by extending Safety-Beam guard rail beyond the ends of the bridge. The rail gradually funnels traffic from the highway onto the bridge.

For use on bridges, Safety-Beam guard rail is supplied in 12-ft, 6-in. sections to fit a post spacing of 6 ft, 3 in. Safety-Beam is readily installed, and can be used with any type of bridge. Its location above the bridge deck is generally the same as its height above the shoulder line in highway construction.

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LITTLE GRAINS OF SAND

(Continued from page 20)

the intelligence of the farmers. It needs only a moment's reflection for the average farmer to realize that, regardless of the statistic, his lot has improved.

He knows that increasing productivity, due to mechanization, has resulted in a drop in the farm population. On a per capita basis, the farmer's income from all sources has increased 16 per cent in the last seven years.

Since 1932, about 10 million persons have left farms. But they're not displaced persons. They've reestablished themselves in the cities and are also enjoying prosperity.

Productivity and Wages. In 1930-31, wholesale prices stood at approximately the same level as in 1840, or 90 years before. Yet, in the same 90-year period, average wage rates increased by approximately 700 per cent. This is a phenomenal and little known fact. No law was responsible.

During the 90-year period there was no national minimum wage fixing and little social legisliation. It was the competition in the goods market which helped to keep prices down, and it was the rivalry among employers for scarce labor which drove wage rates up and up. Yet in spite of this dramatic performance of a free economy, and despite the fact most employees now earn more than the legal minimum, the view persists that somehow government must help raise wages.

The only sound way to raise wages is to increase real prosperity by increasing the rate at which we convert work and raw materials into useful goods and services. This is not theory. It is a truth already dramatically demonstrated in this country.

Meanwhile real wages, adjusted to increases in the cost of living, are three times as high as in 1900.

It would thus appear that if we can maintain a steady growth in productivity, attempts to legislate pay increases are unnecessary.

Air Conditioning. A report on air-conditioning as a factor in electric production was made by C. A. Tatum, Jr., President of Dallas Power and Light. He said the electric power industry's air-conditioning load is expected to exceed 55 million kilowatts by 1963, more than five times last year's 10-million-kilowatt total. He saw the increase in air-conditioning as a favorable factor for utilities whose peak demand is in the winter. He noted that a one-horsepower air-conditioner used for 1,000 hours a year will boost the average residential customer's annual use of electricity 29 per cent, and not require the company to add to its generating capacity.

This suggests the time in the near future—perhaps by 1956—when the summer electric load may exceed the traditional winter peak output.

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OUR assumption of the management of the RECORD next month is to us somewhat like adopting the child of a close friend. Certainly we feel a great responsibility to the parents as well as to the child.

To you who have supported the RECORD for many decades we sincerely pledge our maximum effort. The basic objective of the publication will continue to be the industrial development of the South. We plan to retain the RECORD's best features while injecting new ideas designed to enhance its value to readers and advertisers.

With your continued cooperation, we are confident that we can develop here in the South one of the nation's finest business publications. These are just a few reasons we are so optimistic:

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2. *The* RECORD *is Official:* Beginning with the January issue the RECORD will become the official publication of the Southern Association of Science and Industry, the South's foremost development agency. Supported by the region's leading business firms, educational and scientific institutions, SASI serves as an official advisory group to the Southern Governors' Conference. The proceedings of many important activities will be carried exclusively in the RECORD.

3. *The* RECORD *is Dynamic:* The RECORD will not follow the progress of the South but will lead it! An active research department will be an important part of our organization, and we will place heavy emphasis on expansion trends, product and process development, and market analysis. Our scientific approach will assure that the RECORD, first in the South's history, will also be first in the South's future.

These may be ambitious goals, but they are not unrealistic. They apply equally to the *BLUE BOOK OF SOUTHERN PROGRESS* which we have also acquired. We earnestly hope that we will merit your continued support in these undertakings.

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Is There A Farm Problem?

By Caldwell R. Walker

Editor, Business Trends

Business Profits Are Up; Farm Income Is Down.

The foregoing statement has been making front page headlines for a goodly number of months. Is the news cheerful, calamitous or just matter of fact?

As in most similar cases there are two sides to the question, and it is doubtful if either pros or cons can make out a case clearcut enough to be fully convincing.

For the Southern business man, however, it is a question that justifies thorough examination and careful judgment.

The Situation As Is

Before any situation can be accurately appraised it must be clearly discerned. In the case of the farm situation the facts seem to be about like this:

Agricultural prices and income have been falling steadily for a number of years. They are due to fall further this year and next if estimates of the Economics Bureau of the U. S. Department of Agriculture are correct.

Farmers' realized net income in the third quarter of this year was at an annual rate of about $10.3 billion for all of the United States. This was about 5 per cent less than the second quarter and 10 per cent below the rate in the third quarter of 1954.

Comparing present with recent realized income, U. S. farmers netted $14.1 billion in 1952, $13.4 in 1953, and $11.8 in 1954.

Looking forward into 1956, the Department believes declines will be less heavy than in the current year, with respect to both prices for farm products and to farm income as a whole. Crops, however, are likely to remain high—higher than can apparently be absorbed by the American economy. Thus there will be further additions to carryover stocks and further downward pressure on prices.

In addition to falling prices farmers have been faced with rising costs of production over recent years. These are not likely to decline much if any in 1956, so the squeeze between lower prices and higher costs seems certain to continue for at least another year.

In the meantime business income, including both profits and payrolls, have pursued a fairly steady climb during the time farm income has been falling. There have been exceptions with respect to profits, with minor declines in 1954, but payrolls have climbed steadily throughout.

Viewed With Alarm

For those who see calamity in the farm situation, chief cause for alarm seems to center in the disbalancing effect created by possible underpayment of one segment of the national economy.

There is, of course, another element, the one represented by Politics with a capital P, which views the situation with alarm, but since there usually is little more behind such view than the matter of votes, it will have little place in a study which seeks actual and factual data.

Those fearing a serious disbalancing effect are accustomed to reaching back into the mid-twenties for a comparable era, and to see in that period a trend very much like the one of today—business profits and industrial wages moving toward higher and higher levels, and farm income going steadily down.

The culmination of that earlier period was not good as most observers will today agree but there are many today who do not concede that the farmer's situation today is similar to his plight of the twenties.

Viewed With Complacency

The optimist of today does not believe that today's farmer is vulnerable to the same type of calamity that befell him in the twenties, chiefly because his financial position is so much stronger. While mortgage debt is at an all-time high, and farm borrowings make up a good portion of the total, no farms are going on the block for lack of funds to service the mortgages, and farmers as a whole are today heavy purchasers of all commodities that are being turned out by business in general.

In other words, it is the belief of today's optimists that, despite some decline in income, the farmer still sits high with respect to standards of life, free from financial stringency to say nothing of actual need. Such income decline as has occurred, they believe, is normal and should be allowed to continue until marginal farms have been reduced to the point where supply will no more than meet demand.

Viewed Factually

So far as the Southern business man is concerned, it is not necessary for him to take sides with either view. As stated earlier, it is doubtful if either can present a clinching argument.

For the Southern business man the Southern farmer is not a problem but an opportunity. This is true even if it were proved that Southern farming faces serious problems.

The Southern farmer provides a large chunk of the market for which Southern business men compete. The Southern farmer also is the chief element in the pool of labor upon which Southern business men must rely with an eye to present and future expansion.

The whole thing creates a kind of circle—far from the vicious type usually envisaged. The farmer earns income, buys the products of industry, and as income falls seeks employment in newly established industrial plants where additional income makes possible the purchase of newly created output.

Opportunity Persists

In good times or bad this Southern opportunity continues to be the brightest hope of Southern industrialists. In the rest of the country similar opportunity exists but it is most promising in the South because too many Southern farmers are still trying to make their farms pay more income than is economically practical.

Price supports have come, and with them burdensome carryovers of all types of farm crops. They may stay or they may go, but in neither instance will a solution to the so-called farm problem have been found. The present situation, if perilous, is admittedly far less so than in the highly heralded twenties. The reason is that industry has reached out into the farmlands and allocated factories to sop up surplus farm labor.

This process is continuing today and if it progresses swiftly enough there are few who will be able to find sufficient basis to view the farm situation with alarm.

Along with Atomic threat, the farm situation points out to capitalists, clearly and unquestionably, that the soundest sites for plant location are not in the already teeming centers of industry but in the farm belt where both markets and essential resources are at hand.

And the farmers will love it.

New Minimum Wage Rate Problem Requires Attention to Labor Costs

By Sidney Fish
Industrial Analyst

THE new Wage-Hour minimum of $1 an hour which becomes effective for businesses engaged in interstate commerce, on March 1, 1956, will mean pay and price problems for many Southern employers. To avoid serious transitional problems, employers will have to know how to make the right moves.

It has been estimated that the increase to the $1 minimum means a rise of 33 1/3 per cent from the present minimum of 75 cents an hour. It will provide wage rises to 2.0 million factory workers, of which over one-half are in the South. But in addition, the increase in minimum pay will have far-reaching indirect effects on wages and salary scales in retail and other service trades not covered by the Federal minimum wage law. In cities where factory workers will receive a wage rise of as much as 25 cents an hour, on March 1, under the wage-hour law, persons employed in retail and service establishments are likely to become restless, and turnover in such jobs is likely to increase sharply, unless similar pay boosts are granted in those lines. This would be particularly true in cities where labor is in tight supply, and where factories are having difficulty recruiting new workers.

The pay boosts to factory workers in the South will go mostly to those in the textile, home furnishings, and wood products industries, particularly to trainees, learners, etc. In some of these industries, employers will have difficulty passing along the costs of new pay rises to their customers, owing to keen competition. Eventually, of course, such a substantial wage rise will be reflected in the cost of goods sold at the retail level, unless the use of labor-saving equipment can offset part of tehe increase in costs.

In any event, it seems likely that employers will have to decide, over the next few months, how much of the rise in labor costs can be absorbed, and how much they will be able to pass along to their customers in the form of price rises.

The impact of the boost in minimum wage rates on other industries is likely to be an important inflationary factor next year. For whenever the pay of low wage workers is increased, semi-skilled and skilled workers seek to maintain the differential which they enjoy over unskilled workers. This means that unions representing workers receiving $1.25 to $2 an hour in many mass production industries will seek larger increases than they would normally ask for next year, under the theory of job evaluation. This theory holds that there should be a carefully determined spread between workers at the bottom of the pay scale and those at higher levels of the income ladder, based on skill and other factors.

Of course, in industries where long term contracts have been signed, as in the automobile industry, unions will not be in a position to demand any new wage rise in 1956. But unions in the steel industry and other industries are expected to demand a large pay boost, along with some form of supplemental unemployment benefits to be financed by the employer.

Employers facing boosts in the pay of their workers to $1 an hour should attempt to familiarize themselves with the special provisions under the Wage-Hour law, under which sub-minimum rates may be paid to handicapped workers, apprentices and learners. Many employers have not taken advantage of these provisions in the past, but if the impact of the new wage boost is severe, they may want to curtail the full effect of the pay rise, by seeking to exempt certain workers.

In every case where sub-minimum pay is to be continued after March 1, permission of the Wage-Hour Division of the Department of Labor is required. A special certificate must be filled out in each case. Requirements of the Wage-Hour Division vary, depending on the type of exemption sought. Hence the employer should seek to familiarize himself with the regulations as soon as possible.

Certificates covering learners are obtainable where the employer is unable to obtain experienced workers in jobs requiring a substantial training period, that is, from four to twelve weeks. To obtain approval of an application, it should state what unsuccessful steps were taken to hire experienced workers, before the employer determined to hire and train learners. A description of the jobs covered by the application is also necessary. The employer must also post a notice in any department where he intends to use learners at sub-minimum rates, announcing that he has asked for a special learner certificate. In some cases, special regulations covering learners in certain industries are issued by the Wage-Hour Division of the Department of Labor, and the employer, of course, must comply with these rules. The forms to be filled out by each company are issued by the Wage-Hour Division's regional offices.

Obtaining learner certificates from the Division is actually simplified where the division has already issued regulations covering a specific industry. Hence, the employer should always attempt to find out in advance whether regulations covering his industry have been issued. If they have not, it may be advisable to request hearings by the Wage-Hour Administrator, so that regulations may be issued covering learners in that industry. Following the issuance of such regulations, employers may request a hearing, or file a protest.

A special type of learner, the student-learner, also offers employers an opportunity to hire labor paid sub-minimum rates. Student-learners are part-time workers who are participating in a vocational training program approved by the State or by any accredited educational institution. In this case, the training provided by the employer is supplemented by technical courses given by a school or university. The sub-minimum wages permitted average about four-fifths of the minimum wage.

Approval of hiring apprentices at sub-minimum rates can be obtained if the employer follows a detailed procedure. The state apprenticeship council must be notified of the conditions of employment. Where there is no state apprenticeship council, the Bureau of Apprenticeship of the Department of Labor must be given the necessary data about the jobs to be filled by apprentices. An apprenticeship agreement covering the individual apprentices must be approved by either of these bodies. This is regarded as a temporary permit, good for ninety days. The employer must obtain approval of a certificate from the Wage-Hour Division, to continue sub-minimum payments for a longer period.

The Wage-Hour division has certain rules covering apprenticeship programs. Its definition of a skilled trade excludes clerical, managerial, professional or selling jobs. In general, an apprenticeship program requires employment in a skilled trade for at least 4,000 hours. Supplemental classroom or study courses totaling at least 144 hours a year must also be provided. Wages paid apprentices should average at least one-half of the skilled workers' regular rate, with a gradual rise usually taking place during the period of the apprenticeship. The skills taught should be sufficiently broad so that the worker would be able to apply his skill in other plants in the same industry. Finally, where the plant is represented by a union, the latter must be notified of the apprenticeship agreement.

Another class of workers to whom sub-minimum rates may be paid is the handicapped worker. This means workers so old that their performance is impaired, as well as workers suffering from a specific physical or mental disability.

Certificates covering such workers are issued by the department and are good for one year. The handicapped worker must sign the application. An accurate

(Continued on next page)

(Continued from page 27)

description of the handicap must be submitted by the employer. In some cases, where the handicap is not easily described, or may be open to question, it may be advisable to get a doctor to supply a medical certificate of his diagnosis in the case.

Handicapped workers may not be paid less than 75 per cent of the minimum, but it usually is better to propose a rate closer than that to the minimum. In piece rate operations, the full piece-work rate usually applies, even in the case of handicapped workers.

Certificates are not granted for sub-minimum rates for workers with disabilities, where the impairment of function is temporary, or where the handicapped worker has a rare or unusual skill which is not affected by his disability. Furthermore, to cite a worker's age alone as grounds for a sub-minimum rate will not be enough; the employer must cite proof of a handicap that accompanies age.

It is clear that employers will not be able to derive a great deal of help in holding labor costs down by hiring apprentices, learners and handicapped workers. Cost savings realized through those channels will usually cover only a small proportion of the workers in a plant. But often, supplementary benefits will be gained through the establishment of apprenticeship and learner programs. A new pool of skills will be created which will help to prevent labor shortages. Furthermore, the employment of handicapped workers is a fine human relations policy that will place the employer in a good light in his community.

To meet the problems resulting from higher labor costs, the employer will have to be alert to use new cost-cutting methods.

The employer should give closer attention to morale factors, so that productivity is improved. It might be well, at the time when minimum rates are increased to $1, for the employer to initiate a communications program, under which workers would understand the effect of the wage boost on competitive conditions. The employer should consider telling his employes that better worker effort may be needed in the future, if the plant is to meet competition from plants in other areas.

Finally, the employer should analyze each job covered by a higher minimum rate. To what extent can the job be mechanized so that labor costs will be reduced? Often, the investment required for mechanization may be so low that it will be advantageous to invest money in new methods. This is particularly true in the case of materials handling jobs. Large economies can usually be effected by buying lift trucks or other handling equipment. Often, whole departments can be mechanized at great savings in costs. The building of a new one-story plant, with straight-line production, will often pay for itself in a few years.

The South is at the cross-roads. With labor costs rising rapidly, only a steady program of new investments in cost-cutting equipment will enable employers to meet competition.

Christmas - - 1955

Christmas 1955, as ever across the years, should be a time when men's thoughts turn toward those ideals that can make for peace and realization of the finer things for which they have been groping through the ages.

There is no better occasion than the traditional season of "peace and good will" for men to realign themselves with those principles which serve as the plumb line of truth and justice in the affairs of man. It is the season sublime, an appropriate time for men to heed the admonition given by William Henry Harrison many years ago:

"The false forget, the foe forgive, for every guest will go and every fire burn low and cabin empty stand. Forget, forgive, for who may say that Christmas day may ever come to host or guest again."

At the start of the second half of the 20th century men may well pause at this Yuletide season to reflect upon the progress already achieved by humanity and take inventory for the struggle that lies ahead.

Great advances have been made in all lines of endeavor that have to do with the material welfare of mankind. Inventive genius and mechanical skill have marked out an unprecedented era of prosperity for large segments of the human race in our own day. There remains the need for further development of the spirit of harmony and the exercise of good will to match the brilliant discoveries and accomplishments in the world of science.

Those discoveries and inventions have operated to widen the boundaries that have hitherto hedged in the life of men. They have enlarged the horizons of his vision and obliterated time and space in an unbelievable manner. With all our vaunted intelligence and progress, however, we still come back to the realization that, as Thomas Carlyle said: "This world, after all our science and sciences, is still a miracle; wonderful, inscrutable, magical and more, to whosoever will think of it."

With all its magic and charm the world still needs the touch of those who are informed and motivated by a desire to enlarge and extend the spirit of "peace on earth and good will toward men" which characterizes the Christmas season.

While much has been done to alleviate the suffering that abounds in the world there is yet a great task ahead for all those who WILL do. As songs of good cheer resound during this hallowed season and as the coming of the "Prince of Peace" is again celebrated, the world continues to need the benefiction of His presence.

Have the peoples of the world misunderstandings? Have they lost their way in the quagmire of international bickering, jealousies and recriminations? What has become of their "will to peace?" As we progress away from the holocaust of World War II are we in danger of forgetting the nightmare of suffering it gave to the world? The spectacle of its bombed-out cities, its desolated countrysides and its multitudes of displaced persons are a continuing testimony to the world of the need for finding a way for the peoples of the nations to live together in peace and amity.

The shadows of wars, past and present, hang like a pall over the nations. The ideals and aspirations of their peoples are stifled by fears and uncertainty. The vision of the prophet of old who saw the time when nations would "beat their swords into plowshares, and their spears into pruning hooks" has often seemed a "far-off divine event," but one toward which "the whole creation" moves with a particularly slow, even though a steady, march.

Through application of the principles taught by Him whose coming brought hope to the hopeless and joy to the sorrowing, mankind looks forward to the day when "nation shall not lift up sword against nation, neither shall they learn war any more." Social and economic justice is the great end toward which we strive, but as the philosopher, John Dewey, has said: "Not perfection as a final goal, but the ever-enduring process of perfecting, maturing, refining, is the aim in living."

Electronic Computers Have Value For Small Companies as Well as Large

by Eugene J. Benge

THE electronic computer has possibilities for small companies as well as for the giant corporations. So much publicity has been given to the "million dollar mechanical brains" that the executive of a small or medium sized company may think that computers are not for him. He may be right—but if he is wrong, his competitor may get a two to four year headstart on him.

Computers are important management machines, useful in operations research, engineering calculations and market analysis as well as in office data processing. Their capacities are prodigious, their speeds fantastic. For example, a multiplication which might take you five minutes with a pencil and paper can be done by a computer in a fraction of a second.

Before considering how small companies can benefit from computers let us first outline what they can do.

A computer can

1. Add, subtract, multiply, divide
2. Store, and later find, alphabetic and numeric information
3. Compare, select, sort by categories, arrange sequentially and collate
4. Trasfer and store (file) information
5. Cause imprinting of information
6. Modify its own instructions for reuse

These are much the same operations as those performed by office clerks and research mathematicians.

Electronic computers are machines which use electric pulses to execute data processing operations. A complete system requires:

1. Programming
2. Input
3. Processing
4. Storage
5. Output

Let us examine these five components:

1. **Programming.** Although a computer may yield much the same clerical result as now, the process of achieving that result is very different. Present clerical routines must be analyzed in minute detail, and rewritten in steps which the computer can accept. This phase is known as programming. "Programming a general purpose computer is a skilled, time-consuming and costly operation . . . Nevertheless, the expected savings . . . promise to justify the acquisition and programming costs . . ." (Quoted from Electronic Computers by Laubach and Thompson, Harvard Business Review, March-April 1955). However programming for some of the smaller computers can sometimes be learned in a few days.

2. **Input.** Some medium is required to transfer numeric and alphabetic information into the computer. The principal media are

   a. Tabulating (punched) cards
   b. Perforated tape, or ticket
   c. Magnetic tape
   d. Direct wire connections from an electric typewriter, bookkeeping machine, cash register, or special keyboard

Cards, perforated tape or tickets can be made by key punch machines or as a by-product of the operation of the other machines listed above. Magnetic tape, too, can be a similar by-product, but is more likely to be created by previous operation of the computer. Direct input requires some means of checking everything transmitted to the computer.

3. **Processing.** We have previously listed the principal mathematical and clerical functions which a computer can perform. Any one requires but a fraction of a second; indeed, so far it is impossible to feed information into a computer as fast as it can process that information.

Programming yields a sequence of instruction steps which the machine is to follow, including exceptions to the normal handling or the sequence of a mathematical formula calculation. Sometimes these instructions can be stored in the machine, requiring only the starter button to release them.

4. **Storage.** It is possible to store magnetically:

   a. Program steps, mentioned above
   b. Alphabetic information, such as names of customers or inventory parts
   c. Numeric information such as net balances, or tables of reference.

Storage can be either

a. Internal, as where the program or information is on a magnetic drum, or core.

b. External, as where the program or information is on magnetic tape, punched cards, perforated paper tape, plugboards or pinboards.

5. **Output.** The usual output of a computer will be:

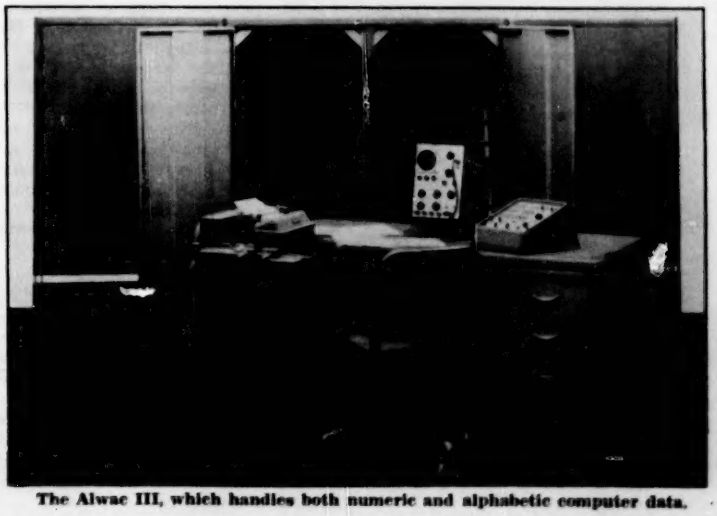
   a. Mathematical results, read from registers.
   b. Printed lists, or forms, made by an electric typewriter, tabulating printer or other machine.
   c. Punched card, perforated paper tape or magnetic tape, prepared for later use.

A wide range of electronic data processing equipment is available, ranging in rentals from a few hundred dollars to perhaps thirty thousand dollars per month. There is a similar wide range of handling speeds, variety of functions, ease of programming, etc.

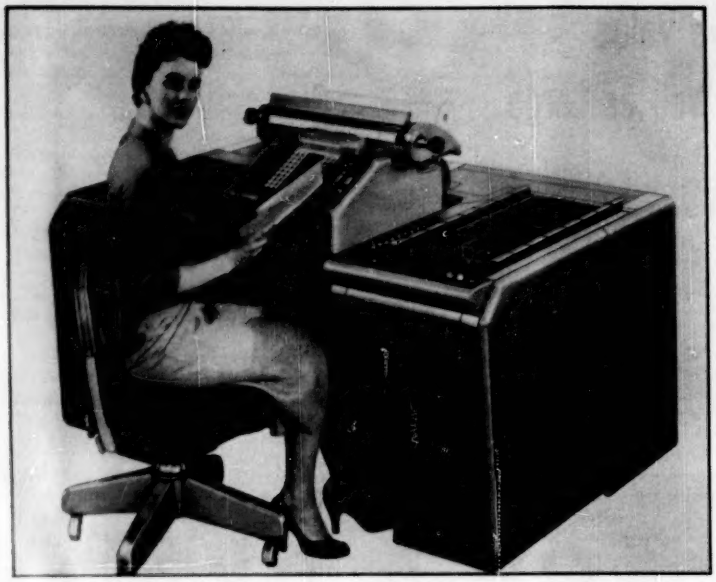
It is not true that any high priced computer delivers more than any medium priced computer; nor that the lowest rental equipment you can get is necessarily the best for your situation. For example, we have developed an efficiency index on thirty computers, according to five quantitative attributes;

1. Speed of addition
2. Speed of multiplication
3. Speed of access to storage
4. Internal storage capacity
5. Maximum output speed

(*Continued on next page*)



The Alwac III, which handles both numeric and alphabetic computer data.



The Burroughs E101 computer which handles numeric data only.

(Continued from page 29)

Here are the results on five of them:

Computer	Efficiency Index (100 is maximum)
A	12
B	44
C	44
D	82
E	82

In general, the more efficient equipment costs or rents for more. However if we divide the efficiency index into capital cost, we get the following amazing figures:

Computer	Cost per Efficiency Index Unit
A	$ 2,800.
B	1,300.
C	3,700.
D	1,500.
E	12,200.

Even these figures do not tell the full story because qualitative features may also require consideration.

This article is intended for small and medium sized companies, having one or more of these characteristics:

1. Ten to 100 clerks
2. At least one large volume routine —billing thousands of customers; balances on thousands of inventory items; thousands of repetitive computations, postings or other transactions.
3. Large potential savings or other benefits from either operations' or market research.

So far, no one has worked out exact rules to determine whether application for a computer exists. Each company must make its own determination; the three criteria above should assist.

Your survey should weigh these choices:

1. Use of a service bureau for processing data.
2. Purchase (or rental) of an individually designed, single purpose electronic component to handle one large volume phase of your problem.
3. Rental (or purchase) of a general purpose computer to meet your principal needs.

Use of a service bureau for processing may be indicated where you could only keep a computer busy for a few hours per month. The single component may be indicated where there is volume repetitiveness of a single transaction. Rental or purchase of a general purpose computer may be indicated where there are demonstrable savings or obvious operating benefits, or both; in this case, you must be sure of service maintenance.

Writing in the magazine Computers and Automation for August 1955, Ned Chapin of the Illinois Institute of Technology, says "the amount of the saving is dependent upon the quality of the systems analysis work, the nature and the merits of the proposed computer systems. This means that high-quality systems analysis may provide the justification for using an automatic computer even in a small company, but that low quality systems analysis may not be able to provide the justification even in a large company."

The attached Table A presents significant data about a number of computers which might be considered by small and medium sized companies. Bear in mind, however, that in many instances additional equipment may be needed—key punch, verifier, summary punch, sorter, magnetic tape unit, tabulating printer, etc. The requirements of each situation will dictate what this added equipment should be.

Typical monthly rentals of this extra equipment are—

Card punch	$ 44.
Card verifier	66.
Summary card punch	88.
Magnetic tape unit	550.
Magnetic tape control unit	2000.
Electric typewriter	35.
Sorter	88.
Printing tabulator	400.

It will be seen that this extra "hardware" can add appreciably to costs. Hence, in comparing one computing system with another, it is important that all necessary auxiliary equipment be listed. Likewise, credit should be taken for any equipment rentals which might be eliminated by the proposed plan.

There are larger computers than those listed in Table A, which will do more but also cost more. Because of the heat generated by tubes, large units may necessitate air conditioning.

Deliveries of electronic data processing machines required from six to eighteen months or more. During that time analyses of clerical routines and programming should be done. Prior experience with punched card procedures is helpful but not requisite. Since the cost per transaction decreases with volume you should plan at the outset for the largest computer your situation makes economically feasible. This means identifying all possible routines to be put upon a computer, even though their programming may require several years for completion.

The electronic computer is a new management tool, not merely another office machine. In the competition for lower costs and new markets, it might well spell the difference between forging ahead or falling behind.

Diebold Plans Expansion At Tennessee Location

Diebold, Inc., has acquired a 17-acre tract adjoining its newly-acquired plant at Dickson, Tennessee, Raymond C. Koontz, president, announced Saturday. Mr. Koontz said the tract was acquired so additional facilities can be erected for manufacturing and warehouse purposes. The Canton company announced October 19 that it had acquired the entire product line and manufacturing facilities of the K. F. Cline Company, Inc.

The Cline company is now being operated as a subsidiary company of Diebold. Mr. Koontz said 10,000 square feet of floor space will be added to the plant and that employment will be raised from 100 to 250. Construction of the new facilities will start early in January and plans for them now are on the drawing board. The new Diebold subsidiary makes a wide line of office filing equipment, lockers for schools, offices and industrial use and other products. Frank Robinson, treasurer, and Dwain Crawford, assistant secretary and treasurer, handled the tract purchase for Diebold.

Dickson is a community of about 5,000, 40 miles west of Nashville.

Table A

Some Characteristics of Representative Low Priced Computers

Manufacturer	Model	Monthly Rental	KIND OF INPUT				INTERNAL STORAGE			KIND OF OUTPUT				REMARKS
			Punch Card	Perf. Tape	Mag. Tape	Machine	Mag. Drum	Other	Capacity in digits	Punch Card	Perf. Tape	Mag. Tape	Machine	
Burroughs Corp.	E101	$ 850		x		x	x		1,200		x		x	No alphabetic output
Hogan Laboratories	Circle 1	?		x		x	x		10,240		x		x	
International Business Machine Corp.	Cardatype	345	x	x		x		x	48	x	x		x	Rental includes a computing unit; cannot divide
"	Model 602-A	225 to 245	x					x	102	x				Is a calculating punch
"	604	550 to 620	x					x	47	x				Is a calculating punch, faster than 602A, and with summary features
"	607	800 to 1850	x					x	324	x				A fast calculating punch
"	CPC	1625 to 1825	x					x	388	x			x	
"	608	2000 to 2250	x					x	360	x				A fast calculating punch using transistors and printed circuits
Logistics Research	Alwac III	1850 to 2100	x	x	x	x	x		74,880	x	x	x	x	
Marchant Research	Miniac	Sold, not rented			x	x	x	x	40,960			x	x	
Monroe Calculating Machine Co.	Monrobot VI	1250 to 1945		x		x	x		4,500		x		x	No alphabetic output
Remington Rand	Type 330	235	x					x	105	x				Is a calculating punch
"	Univac 60	690	x					x	298	x				" "
"	Univac 120	1000	x					x	438	x				" "
Underwood Corp.	Elecom 50	650		x		x	x		1,000		x		x	No alphabetic output
"	Samas EMP	350	x					x	68	x				Is a calculating punch; card has 40 column maximum

South's Water Supply - -

A Dynamic Economic Factor

By McLellan Smith

WATER, one of the South's most vital natural resources, may develop as a major problem for the agriculture and industry of the region. But, as this is written, the position of the southern states with respect to this vital fluid is superior to that of many regions. The problem, which can be averted by foresight, is not one of actual scarcity. It will arise from distribution and water's course from source, through usage and back to the rivers, lakes, oceans and underground reservoirs.

Although enough water falls upon the South and the rest of the United States, each year, to form a lake 30 inches deep, there are sections of the country, notably in the West where water shortages now border on the acute. Parts of Texas and Oklahoma have water shortages, while some of the Atlantic seaboard states (none of them southern) are running into water scarcities, mostly from ground sources.

Basically, the problem to arise for the South will not be one of scarcity, but of more efficient use of supplies, re-use of those supplies, and reclamation of water now allowed to run off as waste. The problem may also involve the relocation of water-using industries in areas where geological research indicates ample supplies without reduction or impairment of natural reservoirs, whether they be underground or surface.

Water, a relatively simple chemical compound, is composed of two parts hydrogen and one part oxygen. It is never destroyed in the industrial process, nor in any other way. Only its form is changed, the changes being for differing periods of time. Eventually, water reverts to its natural form, but not necessarily at the place where man first appropriated it for his purposes.

But, as populations swell, people and industry have daily needs for ever-increasing amounts of water. The cycle whereby water assumes its original form and, in the case of underground water, gets back to its subterranean storage, simply doesn't stay abreast of mankind's growth and the progress of industry.

To simplify water's cycle in the human-industrial picture—there is evaporation from lakes, seas and rivers; condensation in the upper atmosphere, and return to Earth as rain. Rainfall replenishes lakes, seas and rivers, while a portion slowly seeps through the soil to underground storage. This last process, seepage back to the dark recesses of the Earth's crust, may take place in a matter of weeks, but more likely the time lag runs into scores of years.

Actually, there is no substantial reduction in the Earth's basic water supply. Records compiled by the United States Geological Survey show that the overall water supply is about the same today as it was back in the eighteen-eighties, when water records were first made. That is, droughts have been offset by above normal precipitation. No trends toward desiccation or general decline of water sources has been detected. The main cause of the difficulties is the enormous increase in the *use* of water that has occurred since the turn of the century.

The writer italicizes "use" for he would note that it differs from the term "consumption." The latter indicates irretrievable loss, while "use" denotes many things, but as applied to water it only means its form has been changed, temporarily. In time, ranging from days to centuries, used water reverts to its original form and is again available to man and his industries.

At this point, it might be well to look for causes of today's scarcity in some areas of the nation. Take the simple matter of personal cleanliness; since 1900, the number of bath tubs has more than trebled. As we learned more of personal hygiene, the Saturday night "ritual" of 50 years ago is now daily routine for three-fourths of the population, with the remaining 25 per cent using tub or shower two or three nights in addition to Saturday. Also, urban citizens are on the move to the suburbs where a garden, shrubbery and a grass lawn will be more available. These adjuncts to gracious living demand increasing amounts of water. Not to be forgotten, this suburban construction uses no small amount of water itself.

The moves from city to suburban areas do not lessen demands of the cities for water. As residents flee city noise and congestion, business and industry move in to the vacated city squares, bringing larger demands for water than had been made by the former residents.

Ever widening use of air-conditioning has raised near-calamity water problems for many cities. Water used by the larger systems is of such volume that many cities have been compelled to temporarily ban use of the water-thirst systems during periods of drought. This situation points up opportunities for the skilled engineer to develop air-conditioning systems which will not demand water for compressor cooling purposes.

Until recently, agriculture made the greatest demands upon our water supplies; the demands of industry today outstrip those of agriculture. Production of a ton of rayon requires around 200,000 gallons of water; manufacture of a ton of paper requires close to 100,000 gallons; 65,000 gallons are used in the production of a single ton of steel; 9,000 gallons are used in the making of a ton of ice, while more than a half-million gallons are used in the making of 1,000 yards of woolen cloth. This is a very limited list of "every day" items which are voracious in their demands for water. Others include steam production of electric power; tire manufacture; food processing; gasoline and oil refining—all of them relatively minor in the industrial scheme of 35 or 40 years ago. Yet to be considered is water consumption of our two newest sources of power—the atom of uranium, and the thermo-nuclear device (H-bomb). Their water demands are still secrets of security, but it is significant that the most publicized uranium processing plants are located at Oak Ridge, Tenn., and Hanford, Wash., both in areas of plentiful water supplies. Perhaps of greater significance is the location of the H-bomb plant at Aiken, S. C., readily accessible to the water of the Savannah River and the Federal reservoir at nearby Clark Hill.

These are some of the water problems southern industry must turn its attention to. The writer will try, briefly, to point the way toward a solution. The first consideration is the fact that although water is a non-exhaustible resource, it moves through a cycle in which it cannot be hurried. This brings to the fore a need for ways and means of salvaging water that now goes to waste. Either it must be salvaged for immediate re-use, or it must be cleaned up for later use downstream.

Immediate re-use of salvaged water has been accomplished in several industries. Notable is the Kaiser steel plant in California. By condensation and re-use, Kaiser has cut the water demands for production of a ton of steel from 60,000 to 2,000 gallons. An Ohio chemical firm, by recirculating its process water, has reduced daily requirements from 130 million gallons to four million gallons, while a Mid-West steel mill is even using the drainage from its drinking fountains.

As of the moment, water is not a grave problem in the 16 southern states, although some cities near the coast, as they drive wells to greater depths, are experiencing some saline infiltration. In parts of Texas and Oklahoma, ground water levels have dropped to near-alarming levels—so much so that certain Texans have given serious consideration to piping Mississippi River surplus into eastern industrial regions of the Lone Star State.

Veined with a great system of rivers, the South has gone far in the damming

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The Personnel Department

What Keeps the Worker Happy?

SOME years ago the personnel department was regarded as fulfilling its mission if it kept places at work benches and chairs at desks filled. Today, the personnel department is a definite and important function of management. It ranks with sales, engineering, accounting, and other departments which have always been recognized as most important in the success of a business.

No other department is so troubled by advice from experts. There are pollsters and psychiatrists, union people and education people and reformers of all sorts, paying attention to personnel matters. The salvation of the personnel manager is to keep his balance, formulate principles, take advantage of theory when it accords with principles and common sense, and cling closely to the practical.

It is no longer sufficient to have the staff department thoroughly acquainted with the work to be done, its requirements of skill and stamina, and with the statistics of telling what production by whom will be profitable.

Those who are responsible for personnel recruitment and management need to know also the forces which can be brought into action through the application of sound psychological principles.

It requires imaginative enterprise on the part of personnel departments to replace frustration patterns with a feeling of belonging importantly. No synthetic concoction of plans and techniques will do this job; instead there needs to be honest, straightforward and interested activity, starting with top management.

Man Is A Mystery?

It is relatively easy to break down even the most complicated machine into its component parts for analysis, but man is an unsolved mystery, defying accurate measurement. There is no slide rule that will tell whether a prospective employee will be good in such-and-such a job. No astrologer, graphologist or phrenologist can find the right stars, bumps or lines by which to judge.

There are, however, certain basic principles of human nature, application of which by personnel directors will enable workers to make better adjustments to jobs and progress in them. But these principles are not all universal, and the personnel department applying them may expect to find many limitations and paradoxical contradictions.

What goes on in the mind of the worker—and every worker differs from every other worker—is the mystery factor which refuses to conform to specifications. Engineers, building machines as close to mechanical perfection as is humanly possible, recognize that the production problem is not solved until the human factors have been taken into account.

A man is not two people—one a mechanical performer of acquired skills, and the other a man who lives, loves and walks free under the sun. His emotions are mixed up with his daily work, and his actions often arise from obscure, unrecognized motives.

It is, then, part of the personnel department function to attempt to solve the mystery factor "X" in the equation which states that as a man is to life as a whole, so he will be to his work. His tastes and interests in areas far away from his desk or his bench will influence his job performance, because they color the ideas he forms of all he does and all that he is asked to do.

What Workers Want

If the personnel department finds it difficult to appraise just what workers need to make and keep them happy in their jobs, it is almost equally difficult for workers to put into words with any degree of certainty and precision what their wants are.

Provision of good tools and good working conditions are taken for granted. The necessity to work in order to earn a living is accepted by all except a scattering of lotus eaters. But beyond these there are certain desires of the workman which he must satisfy: such things as justice, status, opportunity, and security.

Every person has, buried within himself, purposes toward which he is either consciously or unconsciously striving. There is status even on the assembly line.

Right Man—Right Place

Basic to progress in developing workers is to have the right men in the right places. This prompted one business man to state, quite honestly: "We are even particular about hiring our office boys. After all, they may eventually become department managers, and perhaps President of the company!"

This is one of the most interesting aspects of personnel work: picking the right man for the right job. Ineffective selection results in excessive cost for training, and because of heavy turnover, for training of replacements.

The corporation that is successful in selecting and assigning workers acquires the raw material for a superior staff. It will have a steady flow of workers into supervision and management. The worker must have capacity for the job, or he will fail. On the other hand, if his capacity exceeds the requirements of the job, he will become maladjusted, and unhappy, and will leave it.

This double-barrelled danger means that personnel departments need to analyze every position so as to understand its requirements and opportunities

(*Continued on next page*)

"Around here, Carter, we don't freshen up during the day!"

(Continued from page 33)

clearly. This is just as important in its outcome in job performance as to know the candidate's ability, personality, education, character and health.

The Employee's Responsibility

Work is what we make it within our capacity. It can be worthy and satisfying, whether it be digging a ditch, putting nuts on bolts, building a house, managing an enterprise, painting a portrait, conducting research, or rendering professional service.

But we must give it our interest and strive for accomplishment.

Having sought and found work for which we have ability, acquired the needed skills, accepted the need for rules and regulations, and determined to do the job with the best that is in us, something more is needed for our peace of mind. We need to look upon the job as one in which we shall find that our greatest satisfaction comes from the work itself.

The employee who envies and resents is standing in his own light. Instead, he needs to seek out the qualities in men ahead of him which put them where they are, approach his desire for advancement in a reasonable, analytical manner, and plan to reach the top by steps he will build out of study, experience and common sense.

It is fatal to a worker's happiness to cultivate a criticizing discontent. It gets him nowhere to pull down, to nag at rules, to deprecate authority, to pass judgment on policies of his firm. By and by, when he has progressed some steps, he will be in a position to contribute his thinking on his new level of knowledge and his new level of attainment.

Management's Responsibility

Management needs to concern itself not only with what it does, but also with the impressions workers gather of management personally. Failure to do so may be blamed in some cases for the decline and fall of once great institutions. They were built from the ground up by the initiative, co-operation and hard work of understanding men, but when business reached a certain elevation these virtues gave place to inertia, dictatorship, and lassitude, and decay set in. This is a state of affairs to be avoided, because as Hannah More wrote so truly in her essay on GENIUS 180 years ago: "It is a less formidable undertaking to refine barbarity than to stop decay."

Management does not assure sound industrial relations by appointing a personnel officer and turning him loose, no matter how efficient he may be. The top executive always remains responsible for the kind of employee relations and work performance to be found. He cannot divest himself of this responsibility, though indeed he must delegate some of the responsibility to others as far down as the least responsible foreman or department head in his organization.

Sincerity is essential on both sides. False attitudes will be spotted quickly, with resulting loss of faith. And faith once lost is difficult to re-establish.

Pronouncements and statements by management are not enough. It doesn't do much good if the top executive says that any employee has the right to discuss a grievance with his supervisor or manager unless the top executive sees to it that his supervisory people play their part without discrimination.

Management can help workers to gain status by sharing with them directly the information which should make them understand the economic and business problems faced by the enterprise.

Promotion and Discipline

To keep happy the aggressive and progressive staff we have built up, we need to provide opportunities for advancement. Promotions must take place within an organization if it is not to stagnate.

It is one of the top-drawer problems of management, and solving it depends not so much upon creation by management of new departments and positions upon the encouragement of workers. If workers are trained well, and educated into a keen sense of responsibility, and infected with an aggressive and progressive spirit, they will to a large extent create the opportunities for their own promotion.

Many firms believe in the principle of collective judgment in selecting supervisory staff. A selection board could be set up, within or outside but including the personnel department, and furnished with all employment, medical and personal data of the person being considered, together with the most complete information about the job requirements and the environmental factors.

Such a collective judgment is a guarantee of neutrality and fair play, particularly in the realm of the intangibles and factors which are subject to individual bias.

Department Heads

Upon the manager, supervisor or foreman of a department rests the responsibility of getting jobs done. He is the immediate guardian of plant morale and the link between executive and workers.

The man in charge of a department is important to the personnel department. Production may demand that he be a specially skillful worker, but the personnel department requires much more if it is to avoid the headaches caused by personality clashes, frustration, absenteeism, labor turnover, and all the other ills which accompany dissatisfaction among working people.

In addition to having qualities which win the trust and confidence of management, these department heads must be trusted and relied upon by their subordinates.

They must, too, have the capacity to co-operate among themselves. Every department has a function to perform, some highly specialized. Unless there is a give-and-take as well as a spirit of emulation between departments, we cannot achieve that smooth and efficient and profitable functioning of the whole business we so much desire.

The department head needs emotional stability, so that he may pull through the big and little stresses of daily work. He has to be a man who sees the individual in his department, and at the same time keeps his eye fixed upon the goal to be achieved by group effort.

These qualities are, above all, needed in the personnel department. Its head needs to know what is going on both inside and outside his company in his field of work; to have and to hold the confidence of employees and their representatives; to keep himself and his department up-to-date in the use of techniques and practices; to work in harmony with supervisors and foremen in maintaining good employee relations; to recommend to management the healthiest methods and the soundest policies for the recruitment and training of staff, and for the maintenance of morale.

The personnel department cannot protect its firm against every staff contingency, but by an approach to its work which combines realism and imagination it can build an environment in which fewer trying contingencies will occur. Its task is constructive, not merely remedial.

It is a big job, even were personnel departments working in a perfect environment with perfectly amenable characters. That they are not is one of the crosses they have to bear, but the diligent and devoted personnel man finds that the unknown factors make the job of staff management a fascinating study. The man who concludes that he has succeeded in reducing the problem of man-management to a few simple rules is treading on dangerous and slippery ground.

Alabama Power Company Plans Generating Plant at Gorgas

Construction of a ninth generating unit at Gorgas was approved the last of September by the directors of Alabama Power Co.

Cost was estimated at approximately $24 million.

The company's eighth generating unit, first in its No. 3 Plant at Gorgas, was started in 1953 and is still under construction. This unit is expected to go into operation early in 1956. Its capacity will be 156,250 kilowatts.

The No. 9 unit will have a capacity of 190,000 kilowatts and will be housed in an extension of the No. 3 Plant.

Upon completion of the expansion, total generating capacity at Gorgas will be 736,250. It will continue to be the largest investor-owned steam generating center in the South.

Construction of the ninth unit is expected to begin late this year or early in 1956 with completion scheduled for 1958. The unit will be Alabama Power's largest and one of the biggest in the nation.

Rapidly Growing Southern Car Population Creates Demand for New Assembly & Parts Plant

CAR ownership has been growing more rapidly in the South than in any other part of the country since World War II. Hence it is likely that a number of new plants to assemble cars, or to make auto parts, tires, etc., will be located in Southern States during the next few years.

Auto producers have set up important new assembly and parts plants in Southern states during recent years. In addition to the assembly plants built in Georgia by General Motors and by Ford, Ford has set up a new giant assembly plant at Louisville this year. Chrysler has under way a $1 billion expansion and decentralization program which may result in the establishment of new assembly or parts plants in the South as well as in other areas.

Each new assembly plant means the establishment of a chain of parts plants to provide components for the assembly line. Thus, Ford is building a new multi-million-dollar plant to make auto safety glass at Nashville, Tenn. High wages are a feature of all of the new auto plants. The Nashville plant, for example, will provide jobs for 2,500 persons, who will receive an annual payroll of close to $15 million. This is in line with the national average for Ford, General Motors and Chrysler workers, who have been earning better than $5,000 a year for the last two years.

General Motors, too, has been building new parts plants, to make batteries and other components in the South. If Chrysler builds a new assembly plant in Georgia, Virginia or some other Southern state, it is likely that several new parts plants will be built nearby to take care of the requirements of the assembly plant.

Passenger car output is setting a new all-time peak this year of 8 million units, surpassing the previous record of 6.6 million units established in 1950. Auto manufacturers are predicting an increase of at least 30 per cent in new passenger car sales during the next 10 years, as a result of the growth of population, improvement in the purchasing power of the public, movement of population to the suburbs, etc. Hence the automobile industry qualifies as a growth industry with a bright future ahead of it.

The South's chances for obtaining new auto plants have been greatly improved by the sharp increase in its purchases of new cars during recent years. Not counting the big rise in car sales this year, which is not yet available on a state-by-state basis, many southern states had an increase of over 100 per cent in ownership between 1941 and 1954.

Statistics of the Automobile Manufacturers Association show that of the 18 states in the entire country showing the largest percentage gains in passenger car registrations between 1941 and 1954, that no less than twelve are Southern States.

Here are the figures showing the increases recorded by Southern States:

State	*1954 Registrations*	*Per Cent Increase Since 1941*
Texas	**2,746,000**	**90.1**
Florida	**1,184,000**	**157.1**
North Carolina	**1,031,000**	**81.8**
Virginia	**941,000**	**93.7**
Georgia	**894,000**	**93.7**
Tennessee	**890,000**	**108.2**
Kentucky	**752,000**	**80.6**
Alabama	**721,000**	**117.3**
Oklahoma	**710,000**	**47.2**
Louisiana	**685,000**	**96.9**
South Carolina	**581,000**	**72.9**
Mississippi	**403,000**	**81.7**
Arkansas	**367,000**	**72.3**

It is noteworthy that the average increase for the entire country between 1941 and 1954 was only 63.5 per cent.

Year by year since 1945, Southern States have been showing a more rapid rate of gain in car ownership than the rest of the nation has been able to register. In 1954, for example, Texas, then in fifth position among all states in the country, showed a gain of 4.6 per cent for that one year in car ownership; Florida, a gain of 9 per cent; Virginia, a gain of 6.3 per cent; Georgia, 5.4 per cent; Tennessee, 8.1 per cent; Kentucky, 6 per cent; Louisiana, 7.8 per cent, and Mississippi, 5.8 per cent. The average gain in 1954 for the nation as a whole was only 4.4 per cent.

Truck ownership has scored a similar sharp gain in Southern States since World War II. Of a national total of 9.875 million trucks at the end of 1954, Texas accounted for 743,000 and North Carolina for 259,000, Florida for 219,000, Tennessee, 223,000, and Virginia for 206,000, Kentucky 201,000, and Georgia 232,000, Louisiana, 184,000, Mississippi, 175,000, Alabama, 189,000. The South has thus almost a fourth of all of the trucks in the nation, reflecting industrial gains and improved prosperity on Southern farms.

The large percentage gains of Southern States in car ownership reflects in large part the fact that the South ranked well below the national average before the war, and therefore was in a position to move up quickly on the sharp rise in consumer incomes which began around 1940 and has continued since then. Civilian population per passenger car was 3.3 in the nation as a whole in 1954, but in several Southern States, the number of persons per car was well above that. In Mississippi, there were 5.4 persons per car last year, as compared with only 2.9 persons per car in Florida.

The location of increased steel capacity in the South in recent years is a factor which has aided production of automotive parts. Around the steel producing centers in Alabama, Georgia and Texas, a network of parts plants has sprung up.

Similarly, the creation of new aluminum rolling capacity in Tennessee and in other places will prove of assistance to automotive parts producers, in view of the steady rise in the use of aluminum in auto parts. Similarly, with more plastics going into automobiles, the South is in a stronger position to take care of the requirements of auto companies that use plastics in making molded parts for many car applications, for plastic capacity in the South has risen sharply. The vast textile needs of auto companies are also being supplied by Southern plants.

Entirely aside from the stimulus which increased auto output can give to the South, it is apparent that a vast highway construction program is getting under way which will provide employment and improve transportation in many parts of the country. The Bureau of Public Roads estimated that highway construction during the years 1955 to 1964 should total $101 billion, counting maintenance of old highways and construction of new ones. Of this total the South's needs are estimated at over $22 billion. Even allowing for the possibility that the Bureau of Roads may have overstated the actual building program, it is apparent that a vast highway program will be needed and will be placed into effect, because the steady rise in the number of cars on the roads has created the need for better roads.

Many important toll roads have been built in the South during recent years. An abbreviated list alone runs to many millions of dollars, including the Kentucky Turnpike, the Gastonia-Mount Airy Turnpike in North Carolina, the Turner Turnpike and several turnpike extensions in Oklahoma; a big network of turnpikes in Texas, including those linking Dallas and San Antonio, and Dallas and Hous-

(Continued on next page)

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ton; and the Richmond-Petersburg highway in Virginia.

Winning big automotive plants for the South is not going to be easy. The trend in recent years has been to locate big stamping or blanking plants in areas where several steel plants offer alternate sources of supplies.

This has been done to assure such plants, which are huge users of steel, against shortages of metals. The auto companies feel that if they locate a body stamping plant where several steel plants are in position to take care of the metal requirements, that allocations of metal are likely to be more generous. Furthermore, in the event of a strike affecting one steel plant, the danger of a metal shortage is greatly reduced if there are other sources of supply nearby, one or more of which may not be affected by the labor trouble. In 1954, the auto industry consumed 39 per cent of the sheet steel produced in this country, and the ratio in 1955 was higher.

Since steel shortages are likely to continue or recur for several years, the metal supply factor is basic in the location of stamping plants, foundries, engine and transmission plants, etc. Each of these major component plants is capable of serving several assembly plants. Thus far, nearly all of such major component plants have been located in the North. But sooner or later, economies in transportation will make it advisable to locate one or more of them in the South, so that the Southern market can be better served.

The growth of industry in the South during the next decade is bound to result in a steady rise in auto ownership below the Mason-Dixon line. Factory workers today can afford to buy new cars as well as used cars. As more industry comes to the South, the auto sales potential will grow, and with the growth of the car market, will come more auto factories.

Adding to the sales totals, as the car population rises, will be the huge market in automotive replacement parts and in accessories. The wholesale value of this business in 1954 amounted to $1.689 billion, which means that sales in the South alone ran to several hundreds of millions of dollars.

Ryerson Steel Selects Charlotte, N. C., Site

Joseph T. Ryerson & Son, Inc., large national steel distributor, which has operated a small plant at 831 Moretz av., Charlotte, N. C., since 1953, entered into an agreement to purchase an 11½ acre tract of land at Pinoca in Mecklenburg County, immediately Northwest of the Charlotte city limits, as the site for a new and much larger steel service plant. Charles L. Hardy, Ryerson president, said that the new plant would be erected in the near future.

The decision of Ryerson to seek a new location in Charlotte for a larger and more modern plant, was said to be based on two principal factors, (1) the company was highly impressed with the industrial expansion of the Southeast and had faith that the area would continue to develop at a rapid pace, and (2) with Charlotte situated so nearly in the middle of the region, the city took on added significance as the most logical distribution center for this important section of the nation. From a rail and trucking service standpoint, the site will enable the company to better serve this market, both now and as the market grows.

$30-million Pulp & Board Mill Planned for Brewton, Alabama

Container Corporation of America will build a $30-million bleached sulphate pulp and board mill at Brewton, Alabama, Leo H. Schoenhofen, Senior Vice President, has announced.

"The mill will be the first of its kind owned by Container Corporation," Schoenhofen said, "and will meet a large portion of the requirements for bleached pulp board created by the company's greatly increased production of food cartons. Further, the mill will help supply bleached pulp to Container Corporation's northern boxboard mills."

The company has purchased a 5,000 acre tract of land for the mill site and construction will begin about January 1, 1956. Operation is expected to begin by the end of 1957.

The mill will produce 300 tons of board a day on a 216-inch Rice Barton Fourdrinier machine, with a 196-inch trim.

When the mill is in operation, Container Corporation will spend about $5-million a year for wages and pulpwood in and around Brewton, Schoenhofen said.

About 300 persons, exclusive of supervisory personnel, will be employed from Brewton and nearby communities. The mill will use a combination of soft hardwood and pine, drawn from Escambia and surrounding counties in southern Alabama and western Florida, where the supply of high quality timber is abundant, Schoenhofen said. Transportation to the mill will be by truck and by the Louisville and Nashville Railroad.

Water will be obtained from deep wells or the Conecuh River adjacent to the site. Waste will be drawn off to a series of natural basins on the company's property.

The engineering and construction contract has been placed with Ebasco Services Company, New York City.

Texas Soda Ash Plant In Production at Freeport

The Dow Chemical Company announces that commercial production of soda ash has started at its new $3,000,000 Texas Division plant at Freeport. Its capacity has been announced as 300 tons daily.

The plant utilizes Dow's own process, differing markedly from the process which has been used for years.

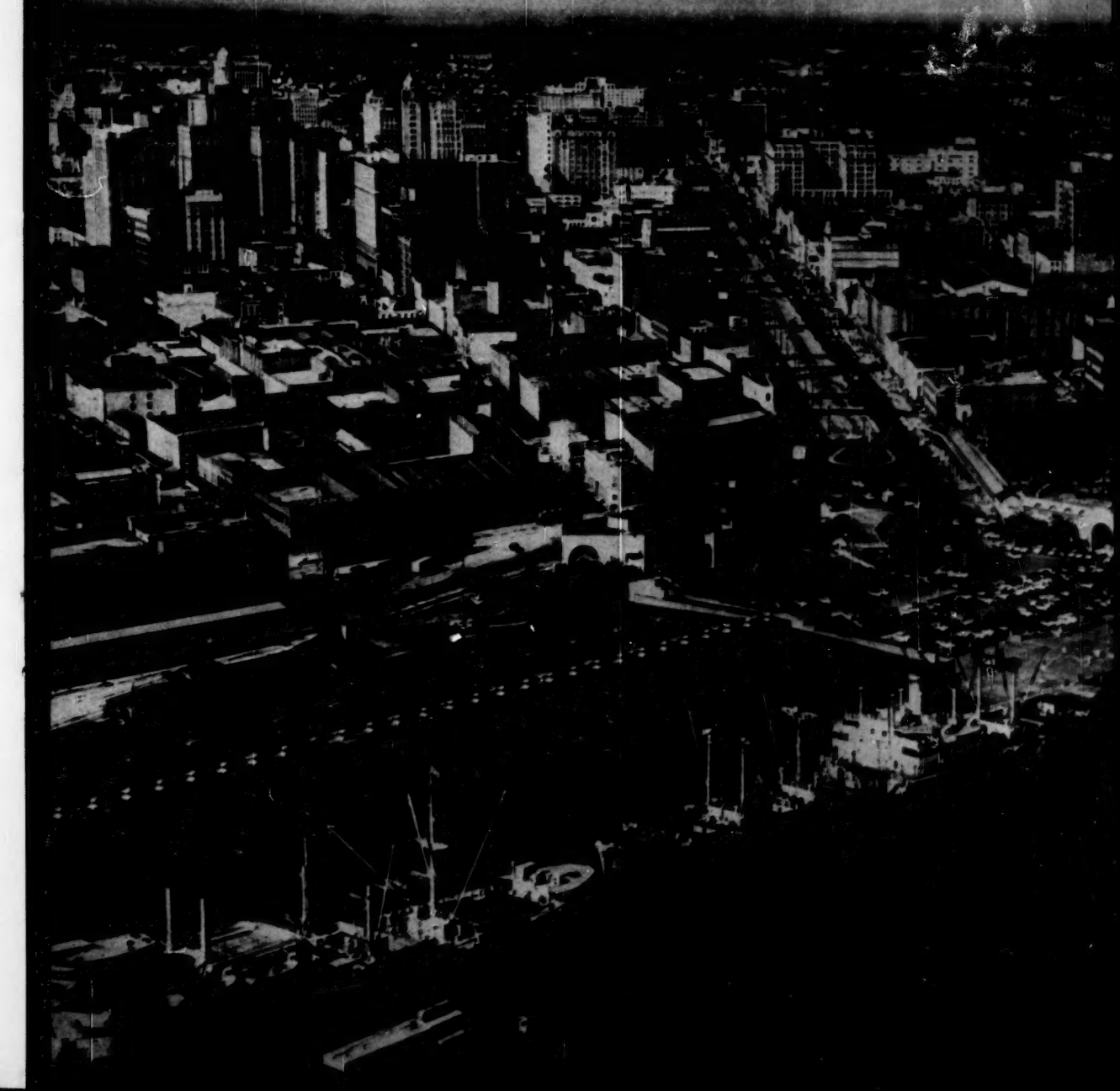
Williams announced that the material, in granular crystal form, will be shipped either in bulk or in 100-pound bags.

One of the oldest of industrial chemicals, soda ash is used in large volume in producing other chemicals, paper, nonferrous metals, soaps and cleansers, water softeners, glass, textiles and in the refining of petroleum.

ILLUSTRATION: Port of New Orleans →

"The boss is really a wonderful guy, and I say that for a good reason—money."

PORT ACTIVITY



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ALABAMA

Mobile

Director of State docks named.—Governor James E. Folsom has appointed Ward W. McFarland, Tuscaloosa attorney, to the position of Director of the Alabama State Docks Department, which position Ralph Hammond, the Governor's Press Secretary, had temporarily held.

The new director is a graduate of the University of Alabama in commerce and business administration as well as in law. He enlisted in the Navy in 1940 as an apprentice seaman and was given a medical discharge a year later as an ensign. In 1942 he entered the Army as a private and served until January, 1946, when he was mustered out as a captain in the Air Force.

Under the law the Docks Director is empowered to name a general manager for the Docks. J. P. Turner is presently serving as Acting General Manager.

"This ocean terminal at the Port of Mobile will continue to serve the shipping interests of not only Alabama, but the neighboring southern states and the vast mid-continental section of the United States. Mobile is their port," stated Mr. McFarland.

Coal tonnage should increase.—In handling coal for export, the State Docks has one of the most up-to-date facilities of its kind on the Gulf or South Atlantic coast. Action initiated by the AT&N Railroad in conjunction with the Frisco Railroad, effective late November or early December, in liberalizing the demurrage and average agreements, is expected to increase the movement of coal from Alabama, Kentucky, Illinois and Indiana through the Port of Mobile over these facilities. Action on the part of one railroad is generally joined by the other railroads which serve the Port of Mobile.

Free time has been extended on loaded coal cars at the Port of Mobile from five days to seven days before demurrage begins, excluding Saturdays and Sundays, which in effect gives the coal exporter nine days free time at the Port. Basis of settlement on average agreements has also been extended from thirty days to ninety days.

FLORIDA

Port of Palm Beach

Forecast for '56.—A 1956 forecast that may far exceed all previous import-export tonnage, terminal revenues and cargo varieties of record is teamed hand-in-hand with this Port's superior roll-on, roll-off trailer facilities along the south side of its Slip No. 2 and the latter is drawing considerable coastwise shipping attention today, in the estimates of L. R. Bishop, Port Director and George M. Antell, Port Traffic Manager. They report for the year's end:

"Today the Port of Palm Beach's unobstructed 125-foot stringpiece along the south side of Slip No. 2 allows easy parking and maneuvering of 200 trailers during loading or unloading operations and this is backed up by these three prime factors:

"100,000 square feet of open (Hard Pack) area storage space for 400 trailers; another 125,000 square feet of open storage area in reserve and U. S. Highway No. 1 (main north-south highway through Southern Florida) which transits Port property."

Bishop and Antell said that "already we are firming ship movement schedules well into 1956 to include:

"Import of 300,000 bags of European cement for Florida builders and contractors.

"Export of more than 1,000 tons of baled ramie fiber, from Everglades fields, to European processors.

"Regular import shipments of British-made automobiles for southeast Florida distributors and dealers.

"Import shipment of some 32,000 tons of Greek pumice for building block manufacturers.

"An estimated 350 tons, monthly, in Leghorn (Italy) glass import shipments.

"A late season import shipment of around 40,000 bags of seed potatoes from Canada for Florida growers."

Bishop and Antell said the foregoing shipments are all in addition to import/export movement of high valued cargo by railroad car ferries of West India Fruit & Steamship Co., between Port of Palm Beach and Havana, Cuba. And they cited a measure of these cargoes as reflected in 1954-55 U. S. Customs collections totals for this Port amounting to nearly $3 million.

Presently in the drawing board stage are plans for a new Port administration building which is planned to house all U.S. Customs and U.S. Immigration offices and personnel assigned locally.

Antell revealed that Bureau of the Census, Department of Commerce, figures for calendar year 1954, show that Port of Palm Beach exceeded the States of Maine and New Hampshire, which have six ports, on export tonnage by 16,000,000 pounds and on export dollar value by $64,000,000; and Port of Palm Beach maintained its position of first in dollar value on exports and second on imports with relation to Florida ports. But, as Antell noted, these figures do not include coastal, coastwise or intercoastal shipments and represent only import/export shipments on which U.S. Customs collections are made.

Bishop reported that Port of Palm Beach revenues from terminal facilities reached $214,609.53 during the Port's fiscal year ending 31 October 1955. This, he declared, set an all time high record which Port of Palm Beach officials anticipate, will, in turn be superseded by the Port's fiscal 1956 returns.

Need for 35 foot minimum depth channel and turning basin set forth in memorandum.—A detailed memorandum has just been completed and distributed to members of the Florida Congressional delegation and top ranking logistical-transportation heads of the several armed services, justifying this Port's immediate need of a 35-foot minimum depth inlet entrance channel and turning basin with direct reference to the Port's logistical readiness in any eventuality of World War III.

The present channel depth is 25 feet plus 2, having recently been swept clean by the dredge USES HYDE. However, the turning basin depth is 30 feet, as is also Slip No. 2 used by visiting tankers and merchantmen.

The memorandum, submitted by G. M. Antell, traffic manager and Capt. N. W. Sharpe, USNR-R, assistant traffic manager, to L. R. Bishop, port director, warned that "World War III is entirely probable" and that "any counter estimate of the world situation is farcical, fatuous and fails of consonance with prudent Department of Defense planning."

Antell and Sharpe declared that "rusting hulls of World War II tankers lie today on the floor of the Gulf Stream off Florida because no deep draft channel haven existed at Port of Palm Beach to enable them to avoid fatal enemy night submarine attack," and continued "fully aware of the traditional tardiness of action by any federal agency, the Port goes on record requesting a 35-foot depth at the earliest practicable and possible moment in frank anticipation of actual World War III."

Logistically, the memorandum writers pointed out that "given subject channel/turning basin at 35 foot depth, plus its existing 173 acres of land property, 5¼ miles of Terminal Belt Line Railroad connecting directly with the Florida East Coast Railway and capable of spotting 600 railroad cars, warehouse and open area storage space, Port of Palm Beach can accommodate deep draft tankers and merchantmen, U. S. Naval, Coast Guard and other armed services vessels; can receive, offload or load full shipload of military vehicles, tanks, wheeled guns,

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weapons carriers, trucks, aviation carriers including helicopters, jet fighters, etc., in a maximum three 24-hour days without interruption in rail operation.

"Palm Beach Harbor (port) is ideally protected anchorage for small boat operations and a possible submarine base. Barges and tugs can be concentrated here for quick dispatch. A complete U. S. Naval Advance Base Command Group can be concentrated, loaded and dispatched from this Port with least possible delay and minimum of expense."

LOUISIANA

New Orleans

Ten month grain receipts up over last year.—Receipts at the New Orleans Public Grain Elevator for the ten-month period ending October 31 surpass last year's figures for the same period by twenty million bushels, it was announced by W. J. Amoss, director of the Port.

Record receipts were 68,718,370 bushels since January of this year compared to 49,251,215 in 1954.

"This," said Amoss, "is indicative of the increased business we expect as a result of the new facilities in operation at the Elevator. Total grain receipts for 1955 should exceed 1953's record-breaking 82,753,673."

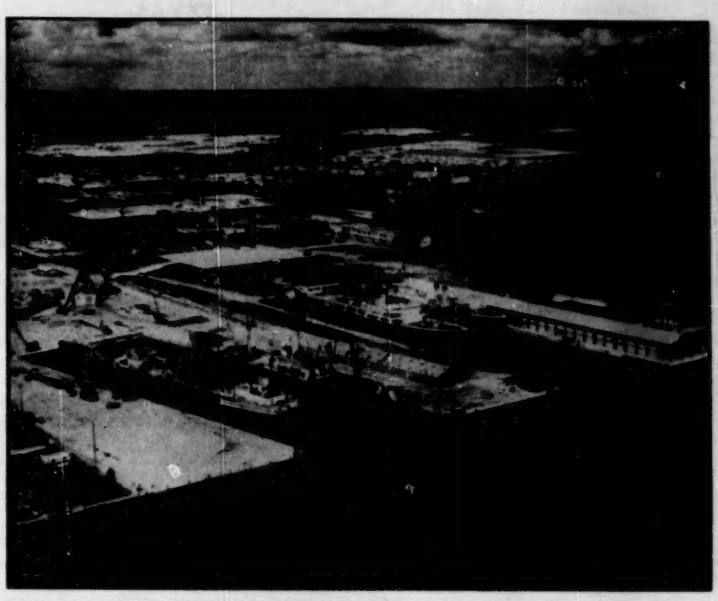
He explained that grain receipts are about evenly divided between rail and barge and that the extra marine leg and the recently installed pneumatic unloader are playing important roles in the increased grain movement.

MARYLAND

Baltimore

High October ship arrivals put all-time record in sight. — Ocean shipping activity at the Port of Baltimore remained at a high level during October, the Baltimore Maritime Exchange reports. During the month, 480 ship arrivals were recorded contrasted with 472 in September and 412 in October last year.

Of the total arrivals last month, 193 vessels were of American registry while 287 were owned by foreign nationals. The latter consisted of 49 Norwegian, 34 British, 31 Liberian, 22 Swedish, 19 Panamanian, 18 Danish, 17 Italian, 16 German, 13 Dutch, 13 Greek, 7 Honduran, 7 Japanese, 5 Venezuelan, 3 Canadian, 3 French, 3 Israeli, 3 Spanish, 2 Argentine, 2 Belgian, 2 Brazilian, 2 Chinese, 2 Colombian, 2 Costa Rican, 2 South African, 2 Yugoslavian, 1 Chilean, 1 Cuban, 1 Dominican, 1, Ecuadorian, 1 Egyptian, 1 Irish, 1 Philippine and 1 Swiss.



Aerial view of the Port of Palm Beach turning basin. Wide apron wharves served by the Port-owned belt line connect with Flordia East Coast Railway. Photo by Gordon Potter.

During the January-October period of 1955, 4,441 ship arrivals have been reported at the Port. This compares with 4,047 in the ten months of 1954.

NORTH CAROLINA

Morehead City

October tonnage set high for year.—Tonnage moved by the North Carolina Ocean Terminals here in October reached 62,628 tons to set a new high for the year.

Col. Richard S. Marr, executive director of the State Ports Authority, released the figures.

During the month, Second Division Marines from Camp Lejeune used the port for embarkation on amphibious maneuvers, and this military movement accounted for more than half of the high monthly figure.

Military tonnage moved here at a figure of 33,890 tons, while the total commercial tonnage is listed at 28,738.

The previous high during the year came in May when 53,614 tons of cargo passed through the Ocean Terminals. The all-time monthly record was set in February, 1954, at 79,136 tons.

Wilmington

Tonnage increase. — The November tonnage report of the North Carolina State Docks at Wilmington shows 18 ships, the largest number to call here in one month, moved cargoes in the amount of 19,715 tons.

Colonel Richard S. Marr, executive director of the State Ports Authority, made the figures available.

Total tonnage for the year has reached 217,599. This is an increase of 150.4 per cent over movement of cargoes for the comparable period last year. The tonnage for the entire year 1954 reached 104,837, and the 11-month figure for 1955 is more than double, with an increase of 112,762 for this year already shown.

Exports usually run 12 to one over imports but this month only about four to one, the export tonnage being 15,708 to the import figure of 4,007. Big import items which contributed to the rise in this category are Philippine mahogany at 1,154 tons, guano at 933 tons, and steel products at 905 tons.

Commodities exported in the largest amounts are scrap at 10,323 tons, wood pulp at 2,164 tons, and dried milk at 1,309 tons.

SOUTH CAROLINA

State dock revenue sets all-time record. —Gross revenue from operation of the state dock system at Charleston totaled an all-time record high of $1,513,863 for the fiscal year ending June 30, according to the annual financial statement re-

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leased by the South Carolina State Ports Authority.

The statement also shows $426,000 allocated by the Authority for dock improvements, repairs and new equipment during the current fiscal year. This budget includes $180,000 for permanent improvements and extensions at Union Pier; $101,200 for repairs to other docks and wharves; $99,800 for warehouse repairs; and $45,000 to purchase a second 45-ton diesel electric locomotive for use on the waterfront switching railroad.

Completing the most successful financial year in its history, the Authority statement shows that revenue increased by $151,274, or 11.1 per cent, over the previous fiscal year, while operating expenses increased only $62,273, or 4.2 per cent. Gross operating expenses, including depreciation, totaled $1,537,825 for the past fiscal year.

Net loss from operations, $23,962, decreased 78.7 per cent from the previous year, which showed a loss of $112,473.

The statement covers operations at the Authority's three general cargo shipping terminals, warehouse and storage facilities and the 11-mile waterfront switching railroad.

Charleston

New firm joins waterfront.—A new firm has joined the growing shipping interests along Charleston's waterfront—R. B. Comar, Inc., foreign freight forwarders and customs brokers.

R. B. Comar, vice-president and manager, says that "the excellent outlook for the Port of Charleston's continued growth" was the major incentive for the new company.

Mr. Comar, with 28 years experience in steamship agencies and freight forwarding activities, has been a licensed customs broker since 1924. In 1954 he served as president of the Charleston Maritime Association and is a former member of the board of directors of the Charleston Propeller Club.

Graham C. Parkhurst, a Citadel graduate formerly with the S. C. State Ports Authority, is also associated with the new firm.

Maritime Association produces Port film.—The Maritime Development Association of South Carolina, an organization recently created by a group of local waterfront operators, has had a documentary-type color film made which depicts features of the ports of Charleston, Georgetown and Port Royal. Its title is "Harbors of History."

The 16 mm. film, produced for the association by Guided Tours Productions, Inc., will run 27 minutes. A shorter version for television use has also been made.

TEXAS

Galveston

Trade increase.—An upward trend in Galveston port business during November is reflected in statistics compiled here in the past week.

The export movement of grain during November was particularly brisk. The 3,658,476 bushels handled were nearly 14 times larger than was handled in the similar month of last year.

While grain shipments increased, cotton, another of the port's major commodities, showed a decline with 93,021 bales moving out, a drop of 9,920 bales from the 1954 figure.

Another barometer of Galveston's port trade, customs receipts, also showed an increase in November with $293,269 being collected as against $98,518 for the same months of 1954.

Largest single cargo of grain loaded.—What is believed to have been the largest single cargo of grain ever loaded at the Port of Galveston was discharged into the compartments of a tanker at Continental Grain Company's Sunset elevator early in November.

The "London Pride," under charter to Continental, took on nearly 16,000 tons or more than 600,000 bushels of grain for delivery to European ports.

Houston

Trend up, outlook good.—The most optimistic tone that has prevailed in nearly a year is being exhibited by Houston shipping interests with regard to business for December and January.

A heavy demand is reported for export space to virtually all countries with the result that ship agents are starting to be "choosy" about the type of cargo booked.

Import trade also continues exceptionally good with the bulk coming from Europe where structural steel and whiskey are furnishing the main tonnage.

The present trend is a continuation of that which has prevailed for the past several months with the result that tonnage figures for the first 10 months of this year reflect an increase over the similar period of 1954.

VIRGINIA

Hampton Roads near all-time peak.—Coal shipments from Hampton Roads are 75 per cent ahead of last year.

During the first 11 months of 1955 the three coal-hauling railroads serving the ports of Norfolk and Newport News dumped a total of 33,834,023 net tons of coal. In the same period of last year, the railroads had dumped 19,167,056 net tons.

Last month a total of 3,476,268 net tons of coal went over the piers, an increase of 1,434,051 net tons over November, 1954, but considerably less than the more than 4,000,000 net tons dumped in October of this year.

As December began, Hampton Roads was less than 250 ships away from an all-time one-year record for martime activity. The Hampton Roads Maritime Association recorded the arrival of 630 ships last month to bring the 11-month total to 6,637 arrivals. In all of 1951, the record year so far, 6,882 ships arrived. There is little doubt that for the first time in its history Hampton Roads will handle over 7,000 commercial ships this year.

The value of all cargo exported through Hampton Roads during the first half of 1955 was reported to be $291,400,000, placing the Virginia ports second only to New York among the North Atlantic ports in cargo values.

Norfolk

Record month.—Booming European industrial demands were responsible for a record month at the Atlantic Seaboard port of Norfolk in departures of merchant vessels with a variety of goods for overseas.

In all, 119 ships departed from the port, most of them carrying general cargo to Europe. Far East ports also received large amounts of cargo, particularly the Philippines.

The Port of Hampton Roads sent out 686 ships altogether during the month, but the bulk of them carried coal. General cargo from the entire port was carried overseas by a record 160 ships.

An all time record of more than 7,000 vessels are expected to have arrived at the port before the end of the year.

Murray promoted as North-East area manager.—William Joseph Murray, who was the New York representative of the Virginia State Ports Authority, has been promoted to manager of the North-East Area for the Ports Authority, according to an announcement by Admiral David H. Clark, executive director of the Authority.

The promotion carries with it greatly increased area responsibilties for commerce development and solicitation, Clark said, which were brought about by the keen interest and needs of shippers in the adjusted territory.

Murray, who joined the Ports Authority in May, 1954, after serving with the East Asiatic Company, Inc., for seven years as assistant traffic manager, is now responsible for the area which includes eastern Ohio, Pennsylvania, northwest Kentucky, northern Maryland, Delaware, New Jersey, New York and all of New England.

SOUTHERNERS AT WORK

Delta Air Lines Appoints Griffith Asst. to President

C. E. Woolman, president of Delta Air Lines, has announced the appointment of Robert L. Griffith as assistant to the president in charge of a new executive office to be established by Delta in Washington, D. C.

Mr. Griffith, who served in a similar capacity with Delta in its general offices in Atlanta from 1948 to 1950, has been chief of the Office of Compliance of the Civil Aeronautics Board in Washington since June, 1953. He will assume his new duties with Delta on November 21.

In a simultaneous announcement in Washington, Civil Aeronautics Board Chairman Ross Rizley accepted Mr. Griffith's resignation "with sincere regret," and publicly acknowledged the new Delta official's "important contribution to civil aviation as evidenced by his impartial, conscientious, and effective enforcement of the Act and Regulations during the past 2½ years."

Mr. Griffith comes to Delta with a broad legal and business background of air transportation. He was born September 11, 1907, in Rochester, N. Y., graduated from Cornell University in 1929 and after 3 years of business returned to Cornell Law School from which he graduated with special honors in 1935. Following seven years of private law practice in Rochester, he entered the aviation field in association with the New York law firm of Root, Clark, Buckner and Ballantine, as an attorney for Pan American World Airways.

Commenting on the appointment, Mr. Woolman said, "Delta has been considering for some time the establishment of an executive office in Washington to serve the company in its relations with the various Governmental agencies with which it has day-to-day contact. Mr. Griffith, with his long experience in air transportation and his previous familiarity with the Delta organization and its policies, is a most logical choice for this highly responsible post. We are very happy to welcome him back to Delta.

Chemstrand Appoints Chapman Newly Created Treasury Position

Appointment of Robert B. Chapman to the newly created position of Treasury Branch Representative at the Chemstrand nylon plant was announced by Howard C. Greer, Treasurer.

Mr. Chapman's appointment is effective immediately. In his new position, he will arrange for payments to Pensacola employees under the company's sickness and accident insurance program and other income protection plans, and will act as local representative of the Treasurer for the disbursement of funds and the handling of any insurance and tax problems arising in that area.

Mr. Chapman joined Chemstrand on February 18, 1952, and has served as General Office Manager at the corporation headquarters at Decatur, Alabama, and most recently served as Cafeteria Manager of the Chemstrand nylon plant.

Prior to joining Chemstrand, Mr. Chapman was Student Union Manager at Michigan State Normal College in Ypsilanti; he served in official capacities with the Y. M. C. A. throughout Michigan; and before this he was a teacher and a coach at Farmington, Michigan. Mr. Chapman received a Bachelor of Arts degree from Michigan State Normal College and a Master of Education degree from Wayne University at Detroit.

Zumwalt New Purchasing Director Thomas Industries, Inc.

Otis Zumwalt has been appointed Director of Purchasing for Thomas Industries Inc., Louisville, Ky., Lee B. Thomas, president, announced. Thomas Industries manufactures residential lighting fixtures in its Moe Light Division, Wright power saws and Electric Sprayit portable paint sprayers and air compressors.

Mr. Zumwalt has been operating his own retail hardware and housewares business in San Francisco. Previously he was vice president and general manager of J. M. Long & Co. in that city, and earlier he was merchandising manager of Butler Bros., San Francisco branch.

Thomas Industries Inc. factories are located in Fort Atkinson, Sheboygan and Milwaukee, Wisc., in Princeton and Hopkinsville, Ky., and in Los Angeles, Calif. Executive offices are in Louisville, Ky.

Permacel Tape Corp. Appoints Roberts to Missouri Valley

The appointment of Mr. Donald B. Roberts as Missouri Valley Division Manager for the Permacel Tape Corporation, New Brunswick, N. J., a Johnson & Johnson company, has been announced by Mr. George A. Fitzgerald, Vice President in charge of Industrial and Automotive Sales for the corporation. Mr. Roberts' headquarters are at the Permacel Division Office in St. Louis, Missouri.

Mr. Roberts joined Permacel Tape Corporation in January of 1950 after many years of sales experience with the Great Lakes Steel Corporation in Detroit and the General Motors Corporation, Fisher Body Division.

The Missouri Valley Division of Permacel Tape Corporation serves the states of Arkansas, Missouri, and parts of Illinois, Iowa, Kansas, Kentucky, Mississippi, Nebraska, South Dakota and Tennessee.

Hercules Powder Announces Several Staff Changes

Wilbur E. Becker has been appointed plant manager at Hercules Powder Company's tall oil plant at Franklin, Va., it was announced by the company's Paper Makers Chemical Department. Mr. Becker succeeds Spencer H. Hellekson who has been transferred to Wilmington as assistant director of operations of the department.

Dennis L. Molnar has been named assistant plant manager at Franklin; Winford J. Janes, Jr., plant engineer; and John B. Moniz, chief chemist.

The appointments were announced by Carl M. Linden, director of operations of the Paper Makers Chemical Department.

Mr. Hellekson, who has been plant manager at Franklin since last July, became associated with Hercules in February, 1939, when he joined the staff at the Experiment Station as a chemist. During the war years, he served in various capacities at Hercules explosives plants and also at the ordnance plants operated by Hercules during World War II. In the past ten years, he has been a supervisor at the Bessemer, Alabama, plant; superintendent of the Holyoke and Milwaukee plants, and assistant plant manager at Savannah plant.

Dr. Robertson Dir. of Research Escambia Bay Chemical Corp.

Appointment of Dr. Nat C. Robertson of Boston to the position of director of research for Escambia Bay Chemical Corporation was announced by a company official.

Robertson will make his headquarters temporarily with the National Research Corporation at Cambridge, Mass., where he has been director of the petrochemical department for several years. He will continue to direct research activities already under way for the chemical company at that place.

Escambia Bay Chemical Corporation now has a multi-million dollar plant under construction near Pensacola, Florida. The first unit of the plant, which will manufacture ammonium nitrate, is scheduled for completion in January, 1956. A polyvinyl chloride plant will be completed the latter part of next year, and it is planned to construct a vinyl plant and an acetylene plant later.

Robertson was born at Atlanta, Georgia. He did undergraduate study at Emory University at Atlanta. He received

(Continued on next page)

Southerners

(Continued from page 41)

his doctorate in physical chemistry from Princeton University in 1942, where he continued study for an additional year in post doctorate work.

During World War II Robertson was connected with Standard Oil Development Company and conducted a special research project in the field of synthetic rubber. From 1947 to 1951, he was in charge of a physical chemistry research group with the Celanese Corporation of America.

Kellogg Elected President Lumber Manufacturers Assn.

Directors of the National Lumber Manufacturers Association, at an annual meeting, Nov. 14-16 in Washington, D. C., elected Lawrence D. Kellogg, Alexandria, La., as NLMA president for 1956 and moved to step up the promotion of lumber and wood products in the building fields.

Kellogg, president of the L. D. Kellogg Lumber Company, succeeds Judd Greenman, Vernonia, Ore., who was named NLMA board chairman. Greenman recently retired as general manager of the Vernonia Division of the Long-Bell Lumber Company.

Walter M. Leuthold, president of the Deer Park Pine Industries, Deer Park, Wash., was elected first vice president of NLMA, succeeding Kellogg.

Elected regional vice presidents of NLMA for 1956 were: A. L. Helmer, president of the Western Pine Association; N. B. Giustina, president of the West Coast Lumbermen's Association; Arthur Temple, Jr., president of the Southern Pine Association, and Henry W. Jones, vice president of Southern Hardwood Producers, Inc.

NLMA directors climaxed their three-day conclave by voting funds to expand the association's technical assistance to builders, architects and engineers.

Clarke Executive Vice President Louisiana Development Firm

Jack Clarke, formerly director of public relations for Texas Eastern Transmission Corporation, has been elected executive vice-president of Freestate Industrial Development Company, according to announcement by N. O. Thomas, Jr., president. In his new capacity, Mr. Clarke will act as general manager of Freestate, the first planned industrial development in this area, and assist in the administration of Cherokee Farms, Inc., an adjacent residential subdivision.

Associated with Thomas and Clarke in these enterprises are C. F. Hawn, president of the East Texas Chamber of Commerce and a resident of Athens, Texas; W. A. Hawn, Jr., also of Athens; and J. V. Hawn of Dallas. C. F. Hawn stated that he and his associates are also giving consideration to future expansion into the field of oil and gas production.

The multi-million dollar Freestate and Cherokee enterprises represent the biggest real estate development in the history of Shreveport. They include the 140-acre Cherokee Farm purchased from Sam Bailey Hicks and his mother, Mrs. Mamie Bourquin Hicks, and the 483-acre Freestate Plantation bought from the heirs of the late W. F. Taylor.

Freestate offices will be in the Henry C. Beck Building in Shreveport, Louisiana.

Mr. Clarke was born in Abingdon, Virginia. After receiving an A.B. degree from Williams College, he completed his formal education with two years of additional study at New York University Graduate School of Business Administration. After initial business experience as a bond analyst and statistician in New York City, Mr. Clarke in 1938 joined Lion Oil Company in El Dorado, Arkansas. During fourteen years with Lion, Mr. Clarke served progressively as internal auditor, manager of budget and statistical department and assistant to the president.

In April 1951, Mr. Clarke was appointed director of public relations for Texas Eastern Transmission Corporation. There he directed the company's public relations, financial relations, publications and advertising.

Frisco Railway Names Baker Assistant to the President

H. A. (Bill) Baker will return to Memphis as assistant to the president of the Frisco Railway, President Clark Hungerford announced.

At the same time, Paul Schmitz, who has been assistant to the president at Memphis, will be transferred to St. Louis to become director of supervisory training for the Frisco, Hungerford said.

Baker was formerly stationed at Memphis, but was transferred to St. Louis, November 1, 1954, to become assistant to the president in charge of development. Prior to his Memphis assignment he was traffic manager for the Frisco at Springfield, Mo.

Schmitz was moved to Memphis from Fort Scott, Kansas where he was superintendent of the Frisco's Northern Division.

Walter Kidde Constructors Elect Two Vice Presidents

Walter Kidde Constructors, Inc., engineers and builders of New York and Houston, has elected Frank L. Whitney and E. G. Robbins vice presidents, William Collins, president, has announced.

Mr. Whitney, formerly chief engineer, will be vice president in charge of engineering. Before joining Walter Kidde Constructors in 1953, Mr. Whitney was Eastern District chief engineer for H. K. Ferguson Company. He is licensed both as a professional engineer and as a registered architect.

A member of the Walter Kidde Constructors organization 28 years, Mr. Robbins will be vice president in charge of construction. He has been director of construction the past 18 months. He is a graduate engineer and has supervised construction on a broad range of construction projects since joining the Kidde organization.

"I'm just wondering if there's any truth to that rumor I started about the plant moving out of town."

NEW PRODUCTS

Restrictor Valves for 3000-Psi

Aircraft Products Co., 300 Church Rd., Bridgeport, Pa., announces its new Series 1100 line of lightweight restrictor valves for 3000-psi hydraulic service.

Available in either fixed two-way or fixed one-way types, and with either internal or external threaded ends, these restrictor valves have a wide ambient temperature range and weigh 20 to 35 per cent less than conventional models.

The fixed two-way type, which provides precise flow metering in both directions, contains a fixed orifice in the center and .008-in. mesh corrosion resistant filters on either side. The fixed one-way type, which meters in the restricted flow direction and permits full line flow at low pressure drop in the free flow direction, contains an orificed poppet with an integral filter. Poppets and interior parts in all models are corrosion resistant.

Adjustable Loading Dock

Rowe Methods, Inc., 2534 Detroit Ave., Cleveland 13, Ohio.—An hydraulically operated 20,000 lb. capacity, adjustable loading dock, designated as Model No. 4 A.F., is now being manufactured by the firm.

Incorporated into the unit is an automatic safety device and self-leveling action both of which compensate for varying heights of freight carrier beds plus carrier spring deflection during freight transfer. The safety feature will hold the deck in its last position should the carrier leave the dock accidentally, thus avoiding injury to personnel and damage to equipment.

Operating technique is simple. The hinged platform deck is raised by an instant-acting push button control to clear the floor of the incoming carrier. When the carrier is positioned, the deck is lowered, until the layover arms and the two-sectioned, hinged bridge plates rest on the carrier bed.

Upon contacting the carrier deck, the safety mechanism and self-leveling action automatically go into operation and are sustained during the freight transfer. After the transfer is completed and the carrier clears the dock, the deck is positioned flush with the dock to permit normal cross traffic.

The standard width is 6 feet with a choice of lengths of 5 feet, 6 feet, 7 feet six inches, and 10 feet.

Mesh Abrasive Cloth

Amerotron Corp., 1407 Broadway, N. Y., N. Y.—Newly developed mesh abrasive cloths are taking over the job of sanding and polishing metal, wood and plastic surfaces in U. S. and Canadian industry, from sandpaper, emery cloth and other conventional materials.

This was the joint report made recently by Amos Griffin, vice-president of the Amerotron Corporation, of New York, a Textron American company, and by E. L. Auker, sales manager of Bay State Abrasive Products Company, Westboro, Mass. Amerotron weaves the special rayon cloth which serves as the base for the abrasive fabric, and Bay State applies the rugged abrasive particles to the cloth and markets it as Gritcloth.

The rayon cloth is covered on both sides and through its mesh openings by abrasive particles, or grits, of aluminum oxide or silicon carbide. The grits are bonded to the cloth by a waterproof resin.

In production comparisons with conventional abrasive materials, this new transparent abrasive cloth, it is claimed, has yielded significant cost reductions, labor savings, smoother finishes and markedly fewer rejects in wide applications throughout industry, it was reported.

A prime factor contributing to the mesh abrasive cloth's performance is the fact that the cloth's open pores permit passage and elimination of the sanded particles. That removes the drawback of sandpaper and other abrasive cloths, whose coated surfaces become clogged and thereby reduced in effectiveness.

Other advantages claimed by the manufacturer of the mesh abrasive cloth are the rugged abrasive qualities of its grits, the strength of the fabric itself, the presence of grits on both sides of the fabric as well as through its openings, and the vise-like bond of the grits to the cloth by the action of the resin on the fabric's adhesive finish.

Magnesium Pallet Dolly

Magline, Inc., 1900 Mercer St., Pinconning, Mich.—The introduction of a new light weight pallet dolly has been announced by the firm, manufacturers of magnesium materials handling equipment.

Lightweight pallet dolly.

Of all-magnesium construction, the pallet dollies are said to provide maximum strength at minimum weight, an important factor for easy one-man handling. According to the company, these new, light weight units 31 to 42 lbs., depending on size) facilitate quick, efficient manual positioning and result in faster, more economical material flow in freight car loading or trucking operations.

The pallet dollies are available in six standard sizes and in capacities of 2000 or 4000 lbs.

Hand Operated Metal Worker

Diesel Power, Inc., Greenville, Pa.—A new, manually-operated metal worker that will bend, punch and shear flat and angle metal bars up to 3/16th thick and 2 inches wide and flat bars, is being introduced to industry this month by the company.

Manually operated metal worker.

The ingenious new machine, which was designed primarily for metal fabricating operations is, it is said, also finding many uses beyond the original intent of its developer, Louis C. Weilands. Because it will up the output of inexperienced labor and increase the efficiency of skilled craftsmen, the new device is being eagerly sought by a wide variety of trades.

Air conditioning and heating, electrical construction, vehicle maintenance, welding shops, sign manufacturers and maintenance organizations, aircraft and marine installations, oil drilling and pipeline construction operations, and even mannual training classes of vocational schools are numbered among the first users of the new metal worker.

The machine, exclusive of the handle, stands 30 inches high. It is 6½ inches deep and 6 inches wide. Weighing 170 pounds, it can easily be mounted on a wall in the shop or attached to a frame or sidewall of a truck, for mobile use. The pump-handle linkage produces a

(Continued on page 44)

NEW PRODUCTS

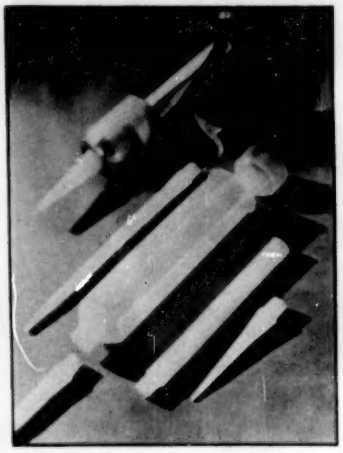
(*Continued from page 43*)

thrust of 250 pounds to the square inch, and simultaneously operates the bender, bar and angle bar shear and the punch mechanism. Dies of tool steel, in sets, come with the machine.

Disposable Plastic Nozzles

Variety Plastics, 112 E. Orange Grove, Pasadena, Calif.—New sealant gun designed to speed sealing operations in aircraft and other assembly work uses disposable cartridges and nozzles molded of Tenite polyethylene.

Cartridges containing caulking compound fit into the gun barrel. Threaded nozzles, available in a variety of sizes and shapes, screw into the front end of the cartridges. A press of the trigger turns on air pressure, causing the sealant to extrude smoothly and automatically. When the supply of sealant is exhausted or the job completed, the polyethylene parts can be easily discarded to eliminate cleaning time and costs.



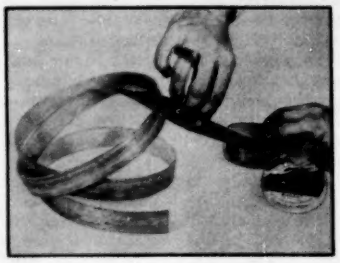
Polyethylene nozzles.

Small, light, and simple to operate, the gun is said to be particularly effective at close-quarters work. Since the Tenite polyethylene nozzles and cartridges do not react with or affect the properties of commercial caulking compounds, the gun is well-adapted for a variety of assembly jobs in the aircraft, automotive, marine, and electrical fields. Gun available from **Pyle Industries, Inc., 8926 Second Ave., Detroit 2, Mich.**

Wood Veneer Tape

An inch-wide tape of wood veneer, so thin and flexible that it is packaged in rolls, is being introduced by **United States Plywood Corporation** to solve the long standing problem of exposed plywood edges.

The new material is called Weldwood Flexible Wood-Trim. It is available in mahogany, oak, walnut, birch and Korina to match the most popular plywood faces. The veneer, one eighty-fifth of an inch thick, is flexed by a patented process and mounted on a latex inpregnated paper backing.



Wood tape.

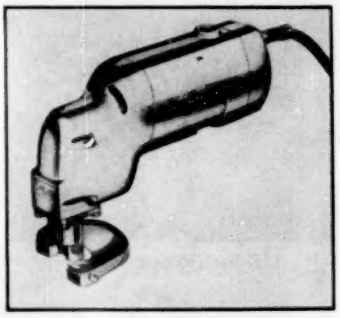
Wood-Trim can be cut with scissors, knife or razor blade and can be applied with any high-quality wood glue. No heat or clamping is required.

The exposed edges of plywood, showing the layers of wood which make up the panel, have long been a major problem for both professional woodworkers and home craftsmen. With Wood-Trim they can match these edges to the face of the panel, even when edges are curved. The new product can also be used for lumber edging and decorative purposes in the home.

Electric Metal Shears

The Mall Tool Company, 7725 S. Chicago Ave., Chicago 19, Ill., has announced a newly designed electric metal shears.

Powered by a universal-type motor, the Mall electric shears has a cutting capacity of up to 16 gauge steel.



Electric metal shears.

This new shears has a stroke length of 3/32", with 2500 strokes per minute. The shears is designed with ample clearance to cut up to .06" thickness. Although the minimum radius of circle is one inch, smaller diameters can be cut in softer and thinner materials by cutting counter-clockwise.

For greater strength and durability, the new tool features a sturdy, lightweight die cast aluminum housing.

The switch is operated by squeezing the tool and depressing the paddle. This provides one hand operation, allowing the operator to hold and guide his material with his free hand.

The knives are expendable and can be replaced with carbide tipped parts for even more lasting durability. An extra set of knives and screws for the knives, and a necessary wrench are included with the original purchase.

Light Weight Hook-Up Device

Public Relations Dept., John Mather Lupton Co., Inc., 420 Park Ave., N. Y. 17, N. Y.—Capable of moving a freight car, yet weighing less than 9 lbs., the Wright Type "R" Pull-A-Way is ideally suited for a variety of hook-up applications including moving motors and machinery, opening freight car doors, stretching and holding tension supports and many other uses.

Designed with a view towards safety, economy, and ease of operation, critical parts of the Pull-A-Way are made of light-weight Tenzaloy, an unusually high yield strength, high tensile strength aluminum alloy, cast by the Littlestown Hardware & Foundry Co., Littlestown, Pa., for Wright Hoist Div., American Chain & Cable Co., Inc., York, Pa., manufacturers of the device. Parts cast of Tenzaloy are the cable drum, handle frame, adjustment pawl and cable sheave.

Rated at 3000 lbs. when double reeved, the Pull-A-Way demonstrated its unusual strength and durability when it was used to set a heavy freight car into motion.

Tenzaloy is an alloy of the Aluminum-Zinc-Magnesium type which was developed by Federated Metals Division, American Smelting and Refining Company, to satisfy the need for an aluminum alloy that would age at room temperature, and which would produce mechanical properties equivalent to those normally obtained only for solution treating, quenching and artificial aging.

2000-lb.-Capacity Portable Lift

The Oster Manufacturing Co., East 289th St., Wickliffe (Cleveland), Ohio.—A 2000-lb.-capacity, multi-purpose manually propelled, hand or battery-powered hydraulic lift, has been introduced by the firm as part of a complete new line. The carrier is designed for handling and stacking heavy, hard-to-manage loads with one operator, where handling efficiency coupled with maximum economy is desired.

The unit is designed to provide four carriers in one: a platform truck, a

straddle fork truck, a portable elevator, and a shop crane. Exclusive features include adjustable legs which allow the carrier's legs to ride straddling the load or beneath the load as required, new design adjustable forks, and remote control as standard equipment at no additional cost on power operated models.

10,000 lb. Cargo Tie-Downs

Eastern Rotorcraft Corp., Doylestown, Penn.—The availability of Model MB-1, Air Force-approved cargo tie-downs for 10,000 pound service is announced by the company. These 3.3 pound tie-downs provide a weight-reduction of more than 40 per cent over previous equipment; and offer further advantages of simplified initial application, tensioning and release up to 5000 pounds.

The 2½-pound saving per unit, possible with the MB-1 tie-downs, can amount to an appreciable total weight reduction. For instance, their use in the Douglas C-124 and the Fairchild C-119 can provide weight reductions of approximately 60 and 70 pounds respectively.

In the MB-1 tie-downs the chain is automatically locked into position as it is inserted into the slot. This locking device replaces the two-step, rotating locking mechanism to be found in older, conventional tie-downs. The release mechanism permits the chain to be unloaded easily, even when under tensions of 5000 pounds. These tie-downs can be hand tensioned to loads of 600 pounds. This hand tension is 200 pounds greater than that possible with conventional tie-downs and 50 per cent in excess of Air Force specifications.

Super Cleaning Atmospheric Air

Wheelabrator Corporation, 1701 S. Byrkit Street, Mishawaka, Indiana, announces Wheelabrator Ultra-filtration, a process developed by its engineers for super cleaning atmospheric air with industrial-type air filtration equipment.

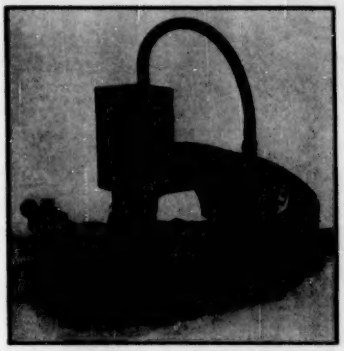
The process may be used in applications formerly employing disposable or viscous filters or low voltage electrostatic precipitators. The advantages claimed of Wheelabrator Ultra-filtration lie in extremely high cleaning efficiency, moderate cost, and nearly complete freedom from maintenance expense.

Ultra-filtration employs conventional industrial Wheelbrator Dustube dust collectors of the tubular cloth filter type. Briefly, the process involves the charging of the filter bags with a filter aid which precoats the filtering surfaces and provides a highly efficient matrix upon which the fine particles of atmospheric dust and tarry matter are collected. One application of filter aid will last from two to three years under normal conditions. Since shaking the spent filter aid and accumulated dust from the filter bags comprises the only maintenance of the filter required, maintenance costs are limited to the infrequent cleaning and recharging of the collector.

The efficiency of the Wheelabrator Ultra-filtration process against extremely fine atmospheric dust and tarry matter is substantially greater than that of any previously used general air cleaning device. The cost of the Ultra-filtration equipment compares very favorably to conventional devices having cleaning efficiencies as much as 30% less than the new process, it is claimed. The maintenance cost of the Ultra-filtration equipment is limited to the removal and replacement of spent filter aid at intervals as great as three years.

Air Operated Numbering Machine

Roberts Numbering Machine Co., 700 Jamaica Ave., Brooklyn, N. Y.—A new Air Operated Numbering Machine for



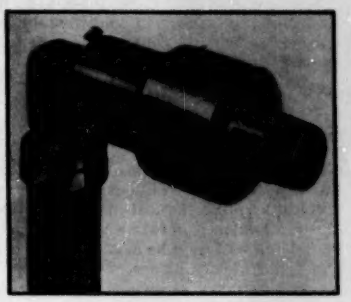
Numbering machine.

automatically printing numbers on cards, labels, folded containers, carbon forms (12 copies), etc., has been introduced.

Machine features "Controlled Impact" to suit each job. Setting is made by a simple turn of the control knob and the operating pressure observed on the indicator dial. Rear and side adjustable gages are provided for accurate positioning of the work. Throat depth is 6 inches. Platform width is 9½ inches. Machine is furnished with a precision built interchangeable numbering head to automatically number from 1 to 999,999. It is easily set for Consecutive, Duplicate or Repeat operation by shifting the Action Lever into desired position. Roman or Gothic style figures can be furnished in size 3/32, 9/64, or 3/16 inch. Machine is quiet, Push Button operated, and will function at 50 to 100 pounds air line pressure. No installation is required other than an air hose connection.

Rotary Pressure Joint

Seamlex Company, Inc., 41-23 24th Street, Long Island City 1, N. Y.—A new improved rotary joint is now being produced by Seamlex Company, Inc. This new Seamlex Rotary, as shown in illus-



Rotary joint.

tration, is a 1½" pipe size, single-flow type PR 25, designed to convey liquids or gases from a stationary pipe outlet to a revolving cylinder, drum, calendar, dry can, etc.

All of the features of the earlier model Seamlex Rotarys, such as Exterior Screw Adjustment, Floating Rotary Seal, and Pressure Equalizing Chamber, are found in this larger Rotary Joint, in addition to a number of improved features.

In line with its heavier construction, this Rotary is equipped with two ball bearings to support and guide axially, the revolving shaft, thus preventing misalignment and wobbling of the shaft. This feature assures continuous leakproof performance, the manufacturer states.

This new Seamlex Rotary Joint is provided with a tamperproof metal seal, and each Rotary is dated so that the length of service can be readily determined.

Rigid Plastic Pipe

Joseph T. Ryerson & Son, Inc., Box 7349, Philadelphia, Pa., which operates 16 steel service plants in the United States, will market a new type of plastic pipe to be sold under the trade name of Ryertex-Omicron PVC pipe. This is a rigid non-plasticized polyvinyl chloride pipe also suitable for use as a structural material.

Rigid polyvinyl chloride plastics, known to the trade as PVC, are relatively new in this country although they have been successfully used in Europe for about 20 years. The type to be marketed by Ryerson has no additives or fillers, which insures maximum resistance to attack by various acids, alkalies, salt solutions, alcohols and other chemicals. It will not support combustion, and this characteristic alone makes it particularly desirable for many installations in which the use of plastic mate-

(Continued on page 46)

NEW PRODUCTS

(*Continued from page 45*)

rials has heretofore been barred or restricted. Pipe fittings and valves of the same material will also be available.

Ryertex-Omicron PVC pipe can be sawed, threaded, solvent welded and heat welded. It will be supplied in Schedule 40 and Schedule 80 pipe sizes.

Gas from Gasoline

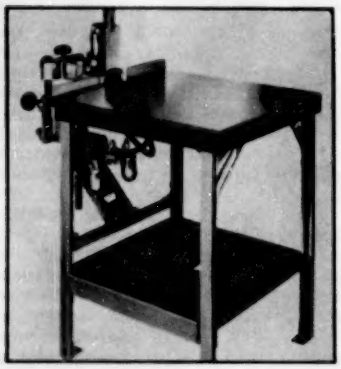
Pressweld, Inc., Alliance, Ohio—After many years of experiment by many investors, a safe, practical method of generating gas from gasoline has been perfected and will soon be available for both home and industrial use.

Using ordinary white gasoline, the new Prest-O-Gas Generator, now being manufactured, produces a clean, hot-burning, non-toxic vapor suitable for all purposes for which natural, manufactured or bottled gas can be used. The generator is highly efficient, using every drop of fuel and leaving no deposits, according to the maker. It will produce enough vapor from five gallons of gasoline to operate, under normal home use, a four-burner gas cook stove and oven and a hot water heater for approximately a two week period. The gas produces an extra-hot flame, permitting lower burner adjustment and extra economy in fuel consumption.

The generator can be used wherever electricity is available and operates only when gas is being used. It is designed to deliver the vapor at extremely low pressure (3½ ounces).

Air-Powered End Stapler

International Staple & Machine Company, 801 Herrin St., Herrin, Illinois.—A new air powered unit, the End Stapler, is now ready for delivery, the company announces.



End stapler.

This new high speed unit has no electrical connections, featuring a new two-cycle air motor with a completely new mechanical trip. The manufacturer states that this unit was specially designed for perfect closures of end opening cartons, full overlap, partial overlap, telescope and many other types of cartons.

The end Stapler can be turned to a 90° angle for center slotted cartons and special applications. It weighs only 155 lbs., is 62¾" high, including the staple magazine, and is only 38" deep.

Snow Melting Dispenser

Speco, Inc., 7308 Associate Ave., Cleveland 9, Ohio announces a new manual spreader for economically dispensing Ice Rem ice and snow melting chemical pellets.

Manual spreader.

Designated as Model IRS-1, the spreader is said to greatly reduce the time and inconvenience commonly associated with "hand throwing" methods. In addition, it is claimed that substantial quantities of Ice Rem can be saved because of the even spray distribution of the spreader.

IRS-1 is operated merely by swinging the funnel-shaped dispenser from side to side. Rate of flow is controlled by an adjustable feed gate located between the 40 lb. capacity hopper and the dispenser. A sturdy, reinforced shoulder strap permits comfortable carrying of the spreader when in use.

Maintenance Lubricating Kit

Gits Bros. Mfg. Co., 1866-AW S. Kilbourn Ave., Chicago 23, Ill.—Something really new for replacement and plant maintenance purposes is the Gits Lubrikit . . . a conveniently boxed assortment of 25 oil cups of 29 different types. . . .

These are the oilers most used for maintenance and replacement throughout industry, as shown conclusively by Gits sales records.

Each type of oiler comes in its own separate bin within the kit. Contents of each bin are fully and clearly described on the inside of the cover.

The Lubrikit offers maintenance men four important advantages, the company claims.

1. SAVES MONEY. No longer a need to pay a big minimum charge for just one or a few oil cups.
2. SAVES DELAY. No more costly delays in replacement. Oil cups are on hand, ready to use.
3. SAVES FUSS. No more red tape—no more annoying forms to fill out (itemizing, ordering, receiving, etc.) every time a little oil cup is wanted.
4. SAVES LOSSES. No more frantic searches for a small oiler that was "here someplace." The Lubrikit itself is a handy, compact container that makes oil cup inventory easy to maintain and keep track of.

Offset Bar and Tube Printer

This new Offset Bar and Tube Printer developed recently by **The Pannier Corporation, 207 Sandusky St., Pittsburgh 12, Pa.,** offers speed, simplicity and precision heretofore unknown for this type of marking, the maker claims.

Code numbers, trademarks, specifications, etc., are printed at speeds up to 200 feet per minute either by variable speed drive or friction driven from conveyed material.

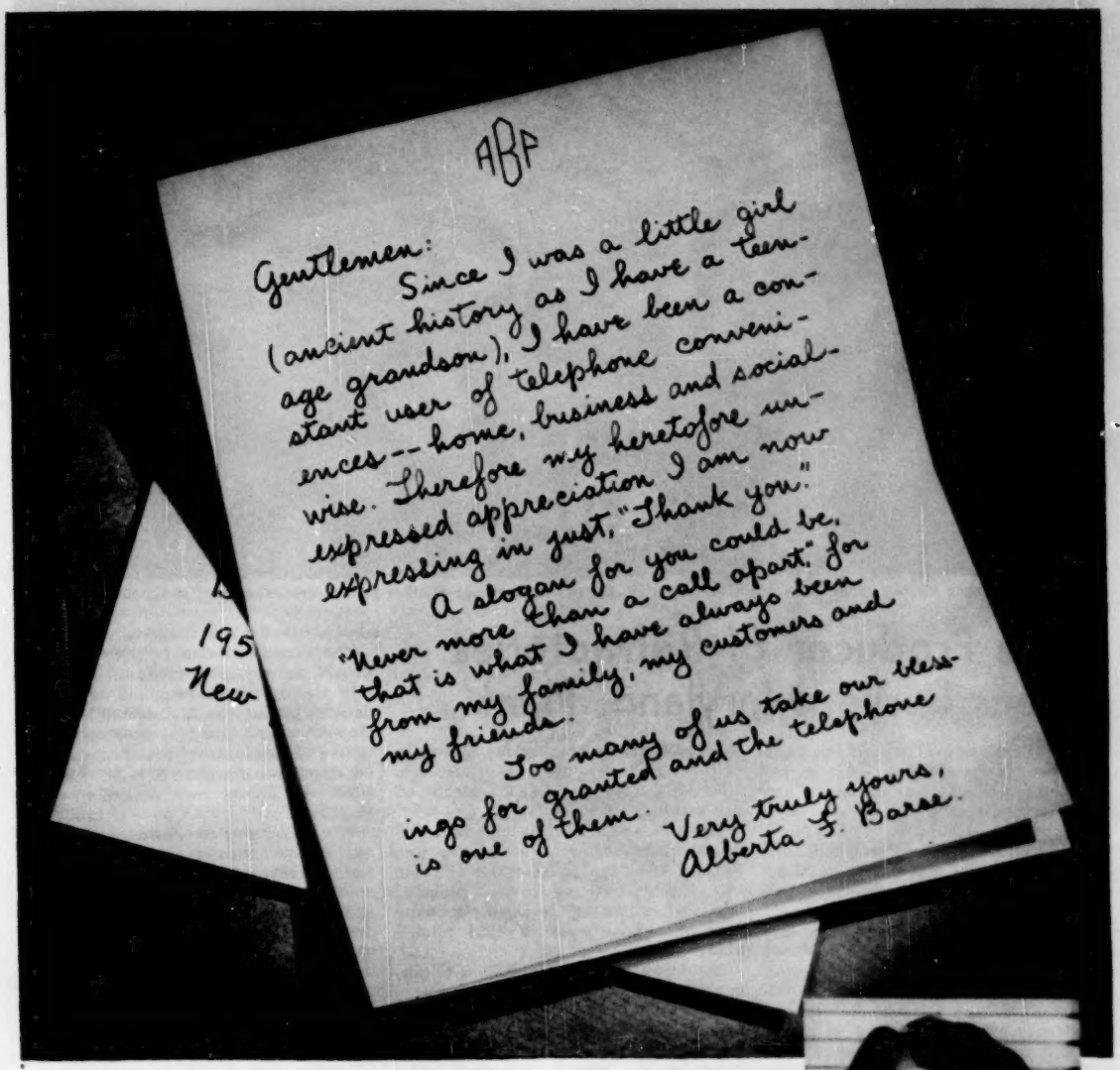
It automatically imprints by friction contact and will accommodate sizes from ½ inch to 14 inches O.D. with only one set of guide rolls. Self contained hydraulic height adjustment completely simplifies adjustments to any size.

The manufacturer states an extremely important feature of this new machine is that setup or change-over time for various sizes, colors, and markings are kept to an absolute minimum by simple adjustments and quickly interchangeable components.

3000 psi Check Valve

Aircraft Products Co., 300 Church Rd., Bridgeport, Pa., announces the development of the first AN-approved ½ in. aluminum alloy check valves for 3000 psi hydraulic service. These valves, it is claimed, provide a weight saving of more than 55 per cent over conventional type check valves.

Two models are available. Aircraft Products Model 1008 with external threaded ends meets government requirements for AN 6249-8 and AN 6207-8. Model 1058 with internal threaded ends meets requirements for AN 6280-8. These valves permit a weight reduction of ¼ lb. per installation.


ABF
Gentlemen:
Since I was a little girl
(ancient history as I have a teen-
age grandson), I have been a con-
stant user of telephone conveni-
ences -- home, business and social-
wise. Therefore my heretofore un-
expressed appreciation I am now
expressing in just "Thank you."
A slogan for you could be,
"Never more than a call apart" for
that is what I have always been
from my family, my customers and
my friends.
Too many of us take our bless-
ings for granted and the telephone
is one of them.
Very truly yours,
Alberta F. Barse.

MRS. ALBERTA F. BARSE

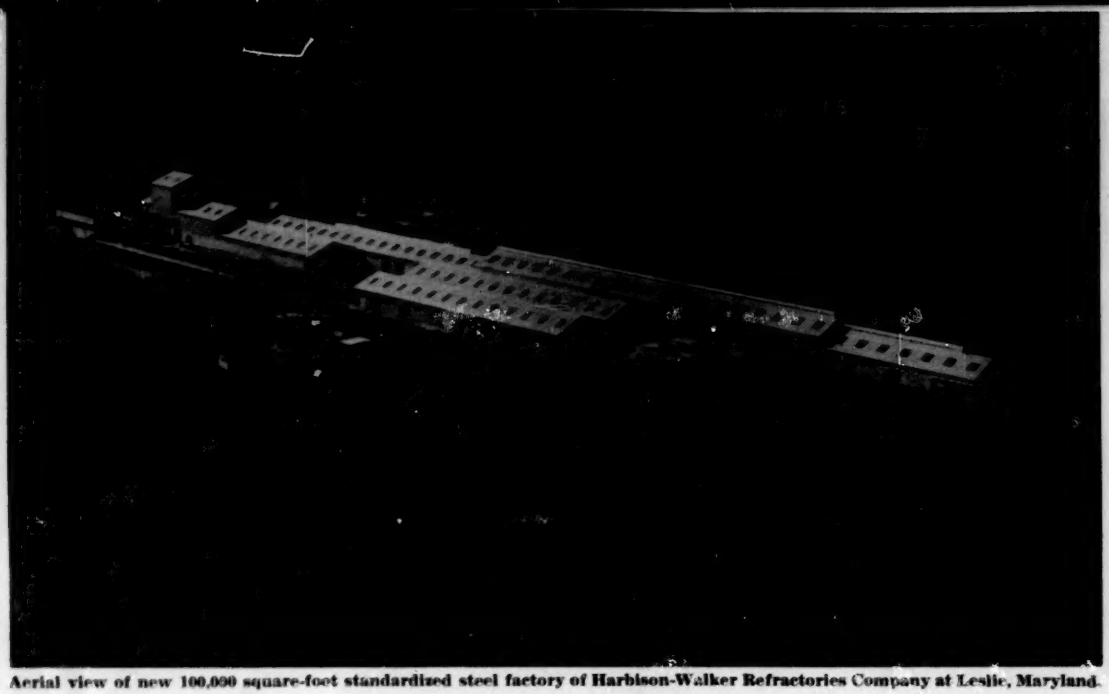
"Never More than a Call Apart"

We received a very nice letter from a woman on Long Island, N.Y., the other day and we thought you might like to share it with us.

Mrs. Barse's letter is typical of the many we receive from people who are kind enough to write about the value of their service and the friendliness and help of telephone people.

Such letters are not only pleasant to receive but an encouragement to all of us to do even better in the days to come.

BELL TELEPHONE SYSTEM



Aerial view of new 100,000 square-foot standardized steel factory of Harbison-Walker Refractories Company at Leslie, Maryland.

Huge Producer of Refractories Opens Leslie, Maryland, Plant

The Harbison-Walker Refractories Company, the world's largest producer of refractories, has just opened a new plant at Leslie, Md., to produce silica refractories, according to an announcement by Earl A. Garber, president. The company's headquarters are in Pittsburgh, where it was founded in 1865 as the Star Fire Brick Company.

The plant is a 100,000-square foot standardized steel structure produced and erected by the Luria Engineering Company of Bethlehem, Pa. It was modified structurally to accommodate several elevated grinding and screening machines and one of the longest tunnel kilns in the world. The general contractor was the Consolidated Engineering Company, Inc., of Baltimore, Md., which also constructed a 2,160-square-foot adjacent office building.

The new manufacturing unit is Harbison-Walker's 33d in this country and Canada. It is the latest major addition in a $35,000,000 expansion program launched in 1951 by the rapidly-growing concern, whose sales in 1953 totaled $78,870,000.

The factory was designed so as to permit future expansion in either direction. It consists of several connected rigid-frame, 60-foot clear-span structures of verying lengths and heights, totaling 92,400 sq. ft., plus a connected 8,400-square-foot flat roof building.

The longest section runs 880 ft. and houses, among other facilities, a tunnel kiln that is 504 ft. long and accommodates 61 loaded cars. A system of exhaust, air and cooling fans is located above the kiln. The tallest part, where the grinding machines are located, is 55 ft. high, while the others vary in height from 16 to 30 ft.

The rigid-frame structures are covered by protected corrugated metal roofing and concrete-block siding. The flat-roof section has concrete-block walls and built-up roofing on a gypsum plank roof deck. It houses the machine shop, electrical repair department, control laboratory and rest rooms.

Transparent plastic skylights, resistant to sun glare and heat, are located at frequent intervals on the roof of the main portion of the plant.

A network of rails has been laid down inside for cars which convey the material in process from one stage of production to the next. Special trucks are employed to lift pallet-conveying cars from one set of rails to another.

The plant is on a 40-acre site at Leslie, just off the Pulaski Highway, about midway between Philadelphia and Baltimore. It is on the main line of the Baltimore & Ohio Railroad, which has a spur running to the shipping department.

The site was chosen because of its proximity to a supply of high-quality raw material and because it is located strategically near important users of refractories in Baltimore, Philadelphia and other industrial areas within the marketing district. These consumers were formerly served by plants in central Pennsylvania.

Harbison-Walker's chain of 33 plants produces refractories of all types in a variety of sizes and shapes. They range in weight from a few ounces to several hundred pounds.

504-foot-long tunnel kiln, one of longest in the world, will produce silica refractories.

Delta Airlines Granted Route Including New York and Houston

Delta Air Lines' extension from Atlanta to New York and from New Orleans to Houston climaxes a 10-year fight by the airline to provide a better airlink between the South and Southwest and key Northeast cities.

The Civil Aeronautics Board Tuesday (Nov. 22) granted Delta 1,075 miles of new routes in the long-awaited decision in the Southwest-Northeast Additional Service Case.

Addition of the 772-mile Atlanta-Charlotte - Washington - Baltimore - Philadelphia-New York segment, and the 303-mile New Orleans-Houston segment to Delta's routes boosts the airline's domestic system to 7,438 miles.

With its 3,327 miles of Caribbean routes (Havana; Montego Bay, Jamaica; Port au Prince, Haiti; Ciudad Trujillo, Dominican Republic; and Caracas, Venezuela), Delta's total system is 10,756 miles.

Delta is now certificated to serve a total of 66 cities in nine countries.

Considered as one of the most important route proceedings to come before the Board in its entire 17-year history, the Southwest-Northeast case began more than five years ago.

C. E. Woolman, president and general manager of Delta, hailed the Board's decision as "just and appropriate" and a "recognition of the South's progress in the past decade."

He said the award was the "culmination of 10 years of effort by his company to provide a better air link between the South and Southwest and the key Northeast section of the country.

"The new route just granted our company is not only an award to Delta," he said. "It is an award to the public. In no case ever heard by the CAB has the public's need for competitive airline service been more convincingly documented."

Chiksan to Build New Plant in Houston

The Well Equipment Mfg. Corp., an operating division of Chiksan Company, has announced plans for the manufacture of Chiksan swivel joints and flexible line assemblies in a new plant to be constructed in Houston, Texas. Chiksan Company is a subsidiary of Food Machinery and Chemical Corporation.

The expansion will provide Chiksan customers with a second manufacturing source for Chiksan swivel joints as well as increased production of Weco products.

The new plant will occupy eighteen acres and will consist of a 64,000 square foot completely air-conditioned shop, several smaller production buildings, and an office building. These facilities will more than double the size of Weco's present operations. Completion is scheduled for the middle of 1956.

DIXISTEEL merchant bars are quality-controlled from start to finish. At each step of production — from molten steel to the finished hot-rolled product — checks and rechecks are made to assure proper physical properties, finish and tolerances.

DIXISTEEL Bars and Shapes are produced in a wide variety of shapes, sizes and grades — plain or galvanized.

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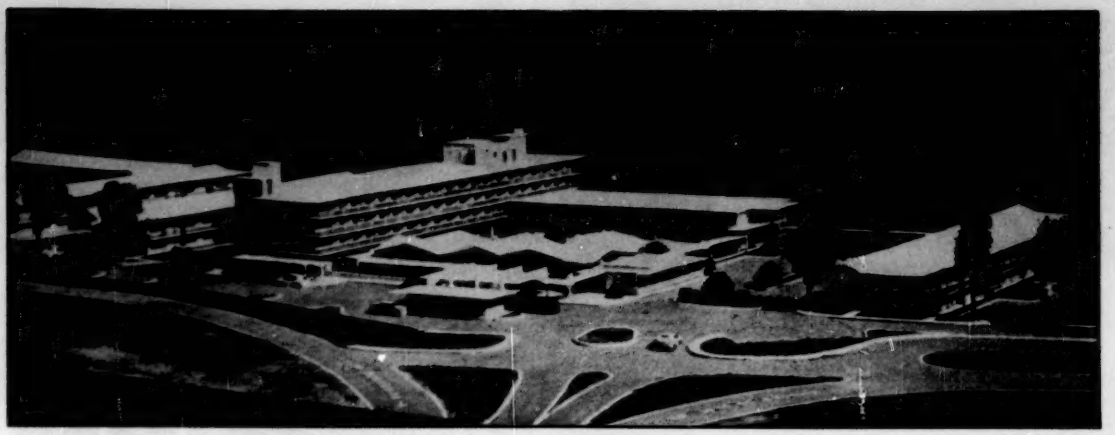
Producers of fine-quality low-carbon steel products, including: hot rolled bars, shapes and strip • drawn wire • nails, rivets, staples • fence and barbed wire • fabricated reinforcing bars • forgings and stampings



This drawing depicts the new drive-in hotel to be built by the Hot Shoppes, Inc., national restaurant chain, in Arlington County, Virginia. It will feature eight main buildings, a 40 x 60 foot swimming pool and many other assets.

World's Largest Drive-In Hotel Planned for Arlington, Virginia

The world's largest drive-in hotel, to be called Marriott's Motor Hotel, will rise near the nation's capital in Arlington County, Virginia, less than a mile from the Pentagon, world's largest office building, J. W. Marriott, president of the Hot Shoppes, Inc., national restaurant chain, has announced.

Construction of the Hot Shoppes' $4,000,000 drive-in hotel on a 7-acre tract on the banks of the Potomac River began in April of this year, Mr. Marriott said, and added that completion of the world's largest drive-in hotel is slated for Spring, 1956.

To deserve title as "world's largest" Marriott's Motor Hotel will boast 348 room units, parking space for 450 automobiles, a large Hot Shoppes restaurant, a 40 x 60 foot swimming pool, wading pool for children, and an extensive "activities" area. At present the world's largest establishment of this type is located in Fresno, California, with 329 units.

The new drive-in hotel is located just off U. S. Highway #1 as it approaches the nation's capital and will be but 10 minutes from the White House, 6 miles closer to the heart of Washington D. C. than the nearest present motel. It embodies a number of unusual concepts in drive-in hotel planning in order to provide an atmosphere of contemporary American living adapted to the needs of the family on a trip.

All rooms will be both air-conditioned and "sound" conditioned through use of double windows and acoustical building materials; will be equipped with telephones and radios, some with TV. Each of the 8 main buildings will be equipped with laundry rooms, including automatic washing machines and dryers.

Guests will be able to register without stepping out of their cars by selecting their rooms from an illustrated color portfolio. Guides on bicycles will escort them to their rooms.

Mr. Marriott explained that the Hot Shoppes' drive-in hotel will combine the conveniences of a motor court with the essential services of a hotel, including filling station, a necessities and souvenir shop, a drug and sundries store, taxi stand, auto rental service, valet and laundry, and a Hot Shoppes restaurant seating 250. Outdoor dining around the pool will be an attraction during Washington's long balmy season.

The structure was designed by architects Joseph G. Morgan and Edwin Weihe. Mr. E. E. Burdge, former American Hotels Corporation vice president, will be manager.

Advertising Executive Predicts 500 Billion Dollar 1965 Economy

America's expanding production "calls for a 50 per cent increase" in the nation's standard of living in the next 10 years, according to Arno H. Johnson, vice president and director of research of the J. Walter Thompson Company.

In the December issue of "Challenge" magazine, publication of New York University's Institute of Economic Affairs, Mr. Johnson says that by 1965 the nation will produce more than 500 billion dollars worth of goods and services. This will bring record paychecks to consumers who will have to buy 350 to 357 billion dollars worth of goods and services in order to maintain a 500-billion-dollar economy of production.

"Unless we change some of our concepts of what a high standard of living should be," Mr. Johnson maintains, "our ability to produce will outrun our ability to consume."

In pre-World War II years, the advertising executive points out, the average income of a family in a middle-income bracket was $1,000 to $1,500.

"We have moved up in our income groups so rapidly that a few years from now most of our families will have annual incomes of more than $5,000. Allowances should be made for the shrinking value of the dollar, of course. But these families do represent a great opportunity for changes in our standard of living, even if they were to take on only the kind of a standard of living that the middle-income groups had during the pre-war years."

Most Americans, Mr. Johnson observes, have increased their ability to buy goods and services beyond the level of necessity according to pre-war standards.

"I believe," he declares, "that people need to be stimulated to use their increased purchasing powr in new ways which represent a higher standard of living according to 1956 concepts.

"A higher standard of living cannot be measured merely in physical units. I think too many people look upon durable goods in our economy as a true measure of our new pattern of living. That is very misleading because only some 13 per cent of our current expenditure of 250 billion dollars for goods and services represents consumer purchase of durable goods.

"In other words, the standard of living is measured not entirely by the availability of durable goods such as automobiles and refrigerators. It covers a great many other things. Since 1947 there has been a very big increase in expenditures of the average family for some form of education. There has been a very big increase in what families allocate for religious activities. There has been a change in the diet and a change in what people do in their leisure time, the way they enjoy life. There has been a trend toward large families. I think this is all a part of our new standard of living."

In the next 10 years, unless there is a war or an abnormal interruption of the production processes, businessmen will face the major task of "prompting consumption," Mr. Johnson concludes.

"Actually," he adds, "it is not so much a problem as it is an opportunity. It means that the mass of our population will have a chance to reach considerably higher levels of living standards."

South's Water Supply

(*Continued from page 32*)

of those streams for production of hydroelectric power and flood control. Hydroelectric power now installed in the South, according to the Federal Power Commission, now totals 7,044,782 horsepower, while four million more horsepower will be available when every river and watershed of the area is developed to full capacity. The South's hydroelectric power position is not as favorable as that of the mountainous Pacific northwest, but this disadvantage is offset by the South's abundant fuel supplies—coal, oil and natural gas—available for low-cost, steam-generated electricity.

As previously stated, water problems of the South have not reached the serious stage, but the writer would point up that as the fastest growing industrial area in the Nation—the world, for that matter—it behooves southern industry, working in close cooperation with State and Federal agencies, to begin now its plans for the utilization and re-use of the billions of gallons of water now running off as waste!

The urgency of the problem was pointed up by President Eisenhower last year when he created a Cabinet Committee on Water Resources and declared:

"If we are to advance agriculturally and industrially we must make the best use of every drop of water which falls on our soil or which can be extracted from the oceans."

Although the Federal Government has spent $14.3 billion on water resources projects since 1824, and is spending at the rate of $750 million annually to develop its water resources, the present problem of water conservation is one for all of us—industrialist, business man, state and municipal authorities, even editors and reporters.

P&W Railway Plans Extensive Industrial District in S. C.

The Piedmont and Northern Railway Company has announced plans for the establishment of an extensive, planned industrial district embracing approximately 150 acres of property just south of Greenville, S. C., in the White Horse section. The project, first of its kind for Greenville, will be known as the White Horse Industrial District.

The overall project will include clearing and grading, installation of railroad service tracks, establishment of new streets, the laying of water mains, sanitary sewer lines, storm sewer lines, and other utility services. When completed the District will provide fully improved warehouse and plant sites for companies requiring rail service.

Restrictions in the District are designed to protect the property owners and assure the development of a first-class warehouse and plant area. These restrictions include a uniform building setback which will assure ample room for trucking, parking, and landscaping, and provisions for the construction of masonry buildings only. Streets in the District will be a minimum of 50 feet wide.

In announcing the plans for the White Horse District from the Charlotte headquarters of the Piedmont and Northern, President W. I. Rankin emphasized the many advantages of a planned district. He said that the creation of attractive sites accessible to utilities and transportation arteries inevitably attracts new businesses to a community. It also provides excellent sites for existing businesses which have outgrown their present facilities, he added.

"We expect to complete the first phase of our project, weather permitting, in about four months," he said. "Therefore, by early next spring we will be able to offer Greenville a well-planned, ideally-located industrial district complete with all utilities and services. Districts such as this one have proven to be important assets to other communities and I am firmly convinced that Greenville will be no exception. Our investment in this project is a considerable one. But we are confident that it will pay off, both for us and for a growing, prosperous city such as Greenville."

The P & N estbalished a similar industrial district in Charlotte in 1937. This district, consisting of 121 acres, now has 46 warehouses and plants built at a cost of about $8 million.

Nearly 100 Industries Selected Oklahoma's

SAND SPRINGS—TULSA Industrial District!

WHO THEY ARE . . .

Commander Mills, Inc., South West Box Co., Kerr Glass Mfg. Corp., American Smelting and Refining Co., Southwest Porcelain Steel Corp., Pedrick Laboratories, Inc., Orbit Valve Co., National Tank Co., Frank Wheatley Pump and Valve Mfr., Lock Joint Pipe Co., General Paint Corp., American Steel and Wire Co., Bethlehem Steel Co., Lincoln Electric Co., Southwest Steel Corp., Standard Magnesium Corp., Standard Aluminum Co., Enardo Mfg. Co., Sheffield Steel Corp., The Boardman Co., Youngstown Steel Products Co., Mo-Vi, Inc., Boyles Galvanizing Co., Stanley Home Products Co., Santa Fe Engineering and Equipment Co., The Fibercast Corp., Graver Tank & Mfg. Co. and many others.

WHAT THEY MAKE . . .

Products manufactured and distributed in the national market (many of them exported) by the Sand Springs-Tulsa area companies include Textiles, Fruit Jars, Corrugated Boxes, Zinc Products, Steel, Electric Fixtures, Chemicals, Canned Foods, Janitor Supplies, Meat Products, Petroleum Products, Dog Food, Porcelain Enameled Steel, Paints and Varnishes, Building Materials and many others.

WHY? FACTORY SITES • TRACKAGE • WAREHOUSES • ABUNDANT WATER • NATURAL GAS • ELECTRIC POWER • SATISFACTORY LABOR-LIVING CONDITIONS • COMPLETE BELT-LINE FREIGHT SERVICE — Direct connections with Frisco, Santa Fe, Katy and Midland Valley Railroads.

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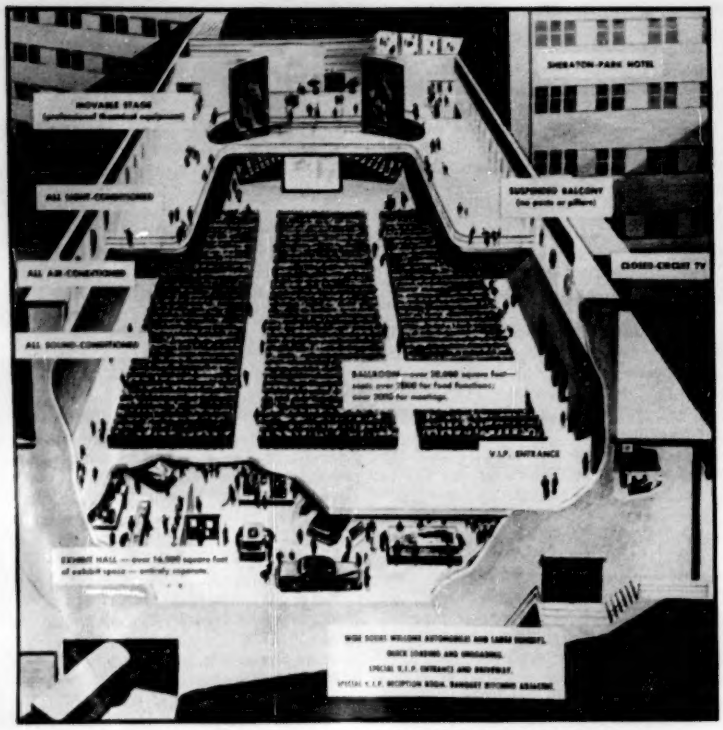

Mammoth ballroom in Washington's Sheraton Park Hotel.

World's Largest Hotel Ballroom Located In Washington, D. C.

A modern, deluxe Trane air conditioning system, so flexible that it can handle a crowd of 3,000 as well as a gathering of 500, is installed at the world's largest hotel grand ballroom, Sheraton Hall. The newly-opened ballroom and exhibition space is a two-story addition to Washington's Sheraton-Park hotel.

The entire air conditioning system is comprised of two large fan systems which serve the 20,000-square-foot ballroom and 16,000-square-foot lower level display area, and several Climate Changers for such areas as the balcony, foyer and kitchen.

This system as a whole is designed to provide fresh, cool, filtered air, and to remove several tons of moisture per hour from the air. Washington has natural high humidity, and the moisture given off by as many as 3,000 active people contributes to the need for dehumidification. The Sheraton's air conditioning system accomplishes this dual cooling and dehumidifying job by cooling the air to a low dry bulb and wet bulb temperature, then reheating it to the entering temperature required to maintain comfortable temperature conditions.

$22-Million Power Addition Scheduled by VEPCO in Va.

Virginia Electric and Power Company has just retained Stone & Webster Engineering Corporation to design and construct a new 165,000 kw addition to the Bremo power station at Bremo Bluff, Virginia, which will bring the station's capability up to 265,000 kw. Cost of the new VEPCO extension is estimated at $22,000,000, with May, 1958, the anticipated date of operation.

The Bremo plant which represented an outstanding design at that time first went into operation in 1931 with two 15,000 kw units. These were later augmented by a 66,000 kw., 1200 psi, 950 F unit installed by Stone & Webster in 1950. Although the original ultimate capacity was anticipated to be 150,000 kw., the new unit will, with its 165,000 kw capability, nearly triple the plant's former capacity. The new unit is the second one of 165,000 kw capacity to be installed by Stone & Webster Engineering Corporation for the Virginia Electric and Power Company system, the other one now being installed at the Yorktown plant near Yorktown, Va.

Maytag Jacksonville Plant Proceeding on Schedule

Construction on the new Maytag East Coast Company headquarters and warehouse building at Jacksonville, Fla., is proceeding on schedule, according to a recent announcement by the Daniel Construction Company of Florida, General Contractors. Begun in mid-July of this year, construction is expected to be completed by the end of the year.

The totally-enclosed, one-story building will consist of a 25,000 sq. ft. warehouse, a 3,500 sq. ft. parts and service department and a 5,000 sq. ft. office area and display room within the one-acre site. The office area exterior of face brick with concrete block back-up is already completed and the precast concrete walls covering the outside of the warehouse are nearly complete. The roof will have a poured gypsum roof deck supported on a steel joist. The interior of the office area will be exposed face brick and plaster on metal stud partitions, with exposed construction inside the warehouse.

Reynolds, Smith & Hills, Jacksonville, Fla., are Architects and Engineers on the project.

New Miami Department Store Annual Payroll of $1,500,000

The new Jordan Marsh-Miami, due to open this winter, will have an annual payroll in excess of $1,500,000, it was disclosed by Richard Van Daggett, president of the new store, largest under one roof ever built in the south.

Mr. Daggett said the $1,500,000 figure, a minimum total for the store, is believed to be one of the largest payrolls in the south Florida area.

Jordan Marsh-Miami, located at Biscayne Boulevard and Venetian Causeway, will have two acres of selling space on each of its three floors, and totals 250,000 square feet overall. It will have free parking for 3,000 cars daily in private automobile parks stretching from the store to the shores of Biscayne Bay north of Trinity Episcopal church.

Chicago Firm Acquires Tenn. Steel Fabricating Firm

Acquisition of the Glazer Steel Corporation's Knoxville, Tennessee structural fabricating facilities by the Allied Structural Steel Companies was announced in a joint release today by officials of both companies. Details as to the terms were not announced.

The Allied Structural Steel Companies, with headquarters at 20 North Wacker Drive, Chicago, Illinois, operate structural steel fabricating plants at Chicago, Hammond, Indiana and Clinton, Iowa.

The management of Allied Structural Steel Companies stated that "Allied was no stranger to the South, as their plants had furnished thousands of tons of all types of structural steel work all over the South and Southwest." "However, with the acquisition of the Glazer plant," the Allied management further stated, "Allied will have an excellent plant facility right in one of the most fertile, growing parts of the South. Our new Knoxville facilities will enable us to better serve the growing needs of the South, and we intend to do everything possible to become an integral part of the huge industrial potential of the area."

The Knoxville facility will be managed by Mr. Byron McKenzie, who has for many years been General Manager under Glazer ownership. Allied officials also said, "No changes in the operating personnel are contemplated."

$20-million Improvement Program Announced by L. & N. Railroad

Purchase of 1,000 new freight cars heads the list of an aggregate appropriation of approximately $20 million for improvements to the property of the Louisville and Nashville Railroad, it was announced by President John E. Tilford.

These freight cars represent an investment of over $8 million, and include 500 box, 200 gondolas, 100 flat, and 200 pulpwood cars. These new additions to the L. & N.'s rolling stock will be built by the American Car and Foundry Company, St. Louis, Mo.; the Pullman Standard Car Manufacturing Company, Bessemer, Ala., and the Greenville Steel Car Company, Greenville, Penn. Delivery will be late in 1956.

Mr. Tilford also said that in addition to the freight cars and other minor projects, the Railroad has authorized the expenditure of $6 million for the expansion and modernization of Hills Park Freight Yard, Atlanta, Ga.; $5.6 million for 35,000 net tons of new 132-lb. steel rail; and $140,000 for the installation of radio communications on main-line freight trains.

The new rail has been purchased from the Tennessee Coal and Iron Division of the U. S. Steel Corporation and will be rolled at its Ensley plant.

Expansion of Hills Park Yard, a joint operation of the L. & N. and The Nashville, Chattanooga and St. Louis Railway, has already begun. Construction will require about two years to complete.

Shreveport Creosoting Plant Acquired by Olin Mathieson

The Shreveport plant of the American Creosoting Company has been purchased by Olin Mathieson Chemical Corporation, W. H. Brown, Vice President for Lumber Operations—the corporation's Forest Products Division, has announced.

The transaction, which includes a two cylinder creosoting plant and an ADZ mill for processing ties, will give Olin Mathieson the ability to more than double its current output of creosoting materials. Creosoting operations, which have been conducted at the Forest Products Division's Bell Street treating plant in Shreveport, will eventually be concentrated at the newly acquired facility, according to Mr. Brown.

Olin Mathieson will continue to produce Wolmanized treated lumber at its Bell Street plant.

N & W Railway to Build 4,000 New Freight Cars

The Norfolk and Western Railway authorized the acquisition of 4,000 new freight cars, 3500 70-Ton all steel coal hopper cars and 500 50-Ton all steel gondola cars, which will cost $30,000,000. The railroad plans to build these cars in its own shops.

This makes a total of 9,100 new freight cars which the railroad has ordered during 1955. The total cost is estimated at $69,585,000. Five hundred and fifty of these cars have already been received.

"The fact that 8,000 of the cars are open top or coal carrying cars is evidence of the railroad's faith and optimism in the outlook for the coal industry," stated President R. H. Smith.

$7-Million Cement Plant Scheduled for Missouri

Kaiser Engineers Division of Henry J. Kaiser Company, Oakland, California, has been awarded the design and construction contract for a $7,000,000 cement plant at Cape Girardeau, Missouri, by the Marquette Cement Manufacturing Company, it was announced.

The project will add a second separate manufacturing unit with a 1,250,000-barrel annual capacity adjacent to an existing Marquette plant, and will raise the Company's total production at Cape Girardeau approximately 71 per cent to 3,000,000 barrels.

Marquette Cement, with headquarters in Chicago, is the nation's fifth ranking cement producing firm, having eight manufacturing plants with a total capacity of 13,600,000 barrels annually in the states of Missouri, Mississippi, Ohio, Iowa, Illinois, Tennessee and Georgia.

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Over-all view of Solite's Bremo Bluff plant, after which the newer Aquadale operation was patterned.

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Solite lightweight aggregate is a carefully controlled product . . . *not* a waste or a by product . . . developed especially for the construction industry . . . manufactured and tested under rigid controls to meet its exacting requirements.

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INSIST ON SOLITE MASONRY UNITS . . . *get all the bonus features at no extra cost.*

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PLANTS: Aquadale, N. C.; Bremo Bluff, Va.
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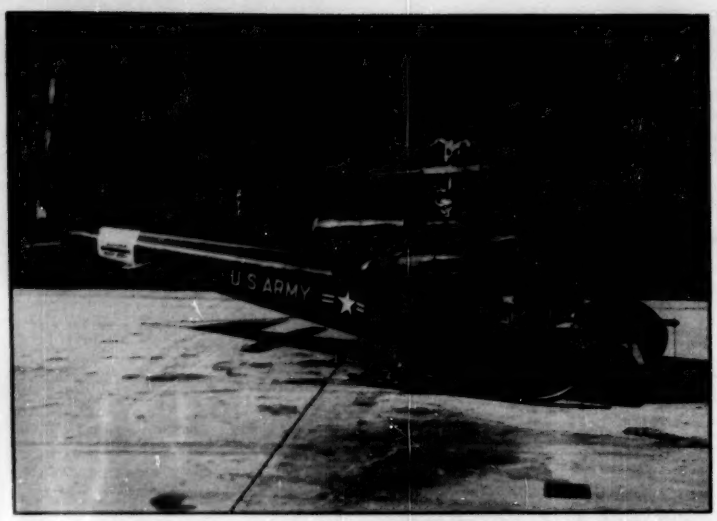

Army XH-40: Full scale model unveiled at Bell Aircraft Corp., Fort Worth, Texas. Main rotor blades are not installed on this mock-up.

Tomorrow's Helicopter Today Unveiled at Bell's Texas Plant

Tomorrow's helicopter is on display today at Bell Aircraft Corporation's plant, at Fort Worth, Texas.

Identified as the Bell XH-40, winner of the Army's utility helicopter design competition, the single-rotor, turbine-powered craft is capable of matching the climbing performance of World War II fighters and the speed of many of today's light airplanes.

A detailed, full-scale mock-up model of the radically different military helicopter was unveiled late in November, more than three months ahead of schedule, to a seven-man Mock-up Inspection Board and some 70 Air Force, Army, Navy, civilian advisors and observers. Called the only new helicopter on the horizon by Bell Aircraft officials, the six-place, closed-cabin XH-40 incorporates many revolutionary features successfully combined with time-tested control systems.

Designed for frontline service, the new Bell helicopter is of low silhouette, compact configuration, and is said to exceed the load-carrying abilities of current light cargo helicopters of equivalent performance. All major components are arranged for easy replacement and repair in the field without the use of special tools.

As radically new as the helicopter it powers, the Lycoming XT-53 turbine engine is the first free-power turbine designed for helicopter and Army use.

The XT-53 boasts low fuel consumption, minimum size and weight, maximum utility, flexibility and maintenance practicability. Another advantage is that a wide range of fuel (JP-4, all-purpose automotive, aviation fuel, even kerosene) can be used. Spark plug fouling, a common problem in Korea where proper high octane fuel was not always available, does not exist.

Capable of a vertical climb rate of 1,900 feet-per-minute from sea level, the Army helicopter is expected to enjoy a better than 15,000 foot hovering ceiling out-of-ground effect on a standard day and an out-of-ground effect hovering ceiling of 7,000 feet on a 95-degree day, all at gross weight. Range is in the 200 nautical-mile class with full payload.

Brand new in design, this engine meets the increasing demand among original equipment manufacturers and engine power users for a compact, light weight, HEAVY-DUTY Air-Cooled Engine that offers a broad, flexible power range.

With a 17.8 cu. in. displacement, the new Model BKN delivers 6.8 hp. at its top speed of 3600 rpm., and a 3.2 hp. at a minimum speed of 1600 rpm. Incorporated in this engine are all of the traditional Wisconsin Heavy-Duty features, including tapered roller bearings at *both* ends of the crankshaft; high tension rotary type *outside* magneto with Impulse Coupling; pump-circulated, constant-level splash lubrication system and efficient AIR-COOLING at all temperatures from sub-zero to 140° F.

For detailed specifications write for Bulletin S-183.

WISCONSIN MOTOR CORPORATION
World's Largest Builders of Heavy-Duty Air-Cooled Engines
MILWAUKEE 46, WISCONSIN

Celanese Corp Produces Fortisan-36 at Georgia Plant

Celanese Corporation of America last month began commercial production of Fortisan-36, a new super-strong industrial fiber, at its Rome, Georgia, plant.

At a luncheon following a tour of the Fortisan-36 facilities, attended by the press and special guests, Harold Blancke, President of the Company, announced that the new fiber had been evaluated by potential customers in several different industries. Their trial reports, Mr. Blancke said, showed that Fortisan-36 has properties of great strength, low elongation and dimensional stability which indicate a bright potential for it in such fields as V-belts, power transmission belting, high pressure hose, conveyor belts, truck tires, plastic laminates, fibers, paper reinforcement, oil hose and tarpaulins.

"Fortisan-36 is the first synthetic fiber ever to be evaluated and produced for the use of heavy industry rather than the apparel trades," Mr. Blancke said. "Until recently, cotton almost completely dominated the field of industrial textiles. It was only among cotton mills that engineers calculated textiles in terms of strength, service and economics. The rest of the industry was principally concerned with those constructions which affected apparel usage—such as color, texture, hand, drapery and other specific characteristics.

Architect's rendering of the new office building to be built for Carrier Corporation in Dallas, Tex. George L. Dahl of Dallas is the architect and J. E. Morgan also of Dallas is the general contractor.

Air Conditioning Firm to Build Modern Dallas Office Building

A modern air conditioned office building will be constructed here by Carrier Corporation to house district headquarters for its Machinery and Systems and Unitary Equipment Divisions, it was announced in Dallas by Cloud Wampler, chairman and president of Carrier.

The new single-level structure incorporating some 11,000 square feet of office space will also provide 9,000 square feet of area for light assembly work and storage. Designed by George L. Dahl, local architect and consulting engineering firm, it will be located at the corner of North Central Expressway and Manderville Road, about eight miles from downtown Dallas. J. E. Morgan & Sons of Dallas is general contractor.

Carrier plans to break ground on about November 15 and completion is scheduled for next spring. The structure and site will be occupied by the company under a long-term lease.

"Continuing heavy increases in demand are being manifested for industrial, commercial and residential air conditioning in Texas and throughout the Southwest," Mr. Wampler reported.

Key executives who will direct activities from the new center are Oscar Mehl, district manager, Machinery and Systems Division, and John N. Gillham, district manager, Unitary Equipment Division.

An outstanding feature of the building will be a striking 30-foot-high tower section which will serve as an entranceway and will also house the central air conditioning machinery providing year-round comfort for the structure.

Georgia Co. Receives First Felt Produced in New Mississippi Mill

Less than five months after the arrival of the first shipments of feltmaking machinery at Lockport Felt Company's new mill, the first finished Tenax papermakers' felt left the plant en route to a customer, Southern Paperboard Company, Port Wentworth, Georgia.

Located at Starkville, Mississippi, the new felt mill is a model plant, incorporating the newest types of machines for weaving, fulling, drying and finishing felts, as well as ultra-modern materials handling equipment. Complete air conditioning and humidification is used in two-thirds of the entire plant area.

TO SUM IT UP-
Natural GAS
IS THE PERFECT FUEL

HOT
CLEAN
CONSTANT
DEPENDABLE
EASILY REGULATED
REASONABLY PRICED

SOUTHERN NATURAL GAS COMPANY
Serving the Growing South
WATTS BUILDING • BIRMINGHAM, ALA.

FINANCIAL NOTES

The directors of **The Mead Corporation** increased the regular quarterly dividend to 60c per share on the Common Shares. In addition a stock dividend of 1/40th of a Common Share was declared on each share. Fractional shares will not be issued but cash in lieu thereof will be paid based on the closing price of the stock on Friday, October 28, 1955.

The company announced Net Sales for the first forty weeks of 1955 of $104,966,847, an increase of approximately 25% over the $83,813,763 of Net Sales in the corresponding period of 1954. Earnings for the first forty weeks of 1955, subject to year-end adjustments and audit, were $6,580,909, equal after allowing for preferred dividends and all charges to $4.92 per Common Share, compared with $4,151,660, or $3.38 per share on the Common Shares outstanding a year ago.

Record sales of $3,523,535 and improved performance over last year in earnings and orders booked for future shipment were reported in the annual report of **Resistoflex Corporation,** manufacturers of specially engineered flexible hose assemblies and plastic materials for industrial and aircraft applications.

Reporting on the company's fiscal year ended June 30, 1955, Edgar S. Peierls, president, stated that the 13 per cent increase in sales over last year was matched by a 24 per cent gain in net profits before taxes, $247,500 this year as compared with $158,900. He went on to explain that these results occurred with the first substantial period of production and sales of the company's new Fluoroflex products, which are high resistance resins molded into hose assemblies, pipe, fittings and parts. There was a "56 per cent rise in profits from operations after absorption of introductory selling and engineering costs, which were not only higher in themselves but actually predicated on a substantially greater volume of business."

• • •

United States Rubber Co. set a new record in net sales and, despite flood loss of nearly 12 million dollars, came close to its record in net profit in the first nine months of 1955, according to a report to stockholders released for publication by H. E. Humphreys Jr., chairman.

Net sales for the nine months totaled $688,775,620, compared with $587,269,614 in the same period last year and the previous record of $657,393,028 set in 1953.

Net profit for the three quarters was $22,290,861, compared with $20,084,571 in 1954 and the record of $22,428,878 in 1951.

Net profit was equivalent to $3.47 a share of common stock and 3.2 per cent of sales, compared with $3.05 and 3.4 per cent in 1954.

• • •

Consolidated net income on the common stock of **Commercial Credit Company** credited to earned surplus for the third quarter ended September 30, 1955, was $6,695,526 or $1.33 per share, compared with $6,012,018 or $1.21 per share for the same period of 1954; for the nine months ended September 30, 1955, was $19,568,689 or $3.90 per share, compared with $17,960,899 or $3.61 per share for the same period of 1954; and for the twelve months ended September 30, 1955, was $25,836,563 or $5.15 per share.

The consolidated net income for the third quarter and for the nine months and also for the twelve months ended September 30, 1955 was larger than for any other respective periods in the history of the Company.

• • •

Sales for **Pittsburgh Plate Glass Company** and consolidated subsidiaries for the first nine months of 1955 were $428,949,999, an increase of 39% over sales of $309,278,171 for the same period of 1954.

For the third quarter of 1955, the company had sales amounting to $140,414,174 as compared with $107,046,066 for the third quarter of the preceding year, according to Harry B. Higgins, president. The figures for 1955 include Canadian Pittsburgh Industries, Ltd., a wholly-owned Canadian subsidiary.

Net earnings for the nine-month period ended September 30 were $45,377,010, equivalent to $4.87 per share, after the provision of $52,510,972 for income taxes. During the same period of 1954, net income was $27,530,062 or $2.99 per share after tax provisions amounting to $26,958,106.

• • •

Net income of **Freeport Sulphur Company** for the nine months ended September 30, after all charges, including provision for federal and state taxes, amounted to $9,308,513, equivalent to $3.72 per share on the 2,500,065 shares of common stock outstanding.

During the first nine months of 1954 net income amounted to $7,523,814, or $3.13 per share on the 2,400,000 shares then outstanding.

Freeport earnings for the three months ended September 30 were $3,437,787, or $1.37 per share, compared with $2,749,609, or $1.14 per share, for the third quarter of 1954. Earnings per share are based on shares outstanding at the close of each period.

• • •

Sales and earnings of **Thomas Industries Inc.** for the third quarter set new highs for the company, Lee B. Thomas, president, reported.

Thomas Industries and subsidiaries' net for the three months ended September 30 was $266,506, up from $199,777 after taxes for the like period in 1954. On a per share basis, this increase represents a jump of earnings available for common dividends to $1.12 a share for the quarter from $.83 a share last year, based on shares outstanding September 30, 1955.

Earnings for the nine months of 1955 were $691,070 as compared to $563,257 for the nine month period in 1954. On a per share basis earnings available for common stock dividends were $2.89 for the nine months of 1955, against $2.33 for the like period in 1954.

• • •

Alan Wood Steel Company operated at full capacity throughout the third quarter of this year and sales for the period were the largest for any third quarter in the Company's history, Harleston R. Wood, President, and J. T. Whiting, Chairman, reported. Tonnage produced was also at an all time high for a third quarter, the officials stated.

Net sales of Alan Wood Steel Company and subsidiary for the quarter ended September 30, 1955, reached $15,512,283 compared with $7,328,006 in the like quarter of 1954. Net income, after all charges and taxes, for the September quarter amounted to $714,272, equal, after preferred dividends, to 97 cents a share on 656,053 common shares outstanding on September 30, last. This compared with net income of $143,557, equal, after preferred dividends, to 10 cents a share on 624,812 common shares outstanding at the end of September last year.

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RICHMOND 5, VIRGINIA

$344-Million in Construction Expended in Houston in 1955

An estimated $344,000,000 worth of construction in Metropolitan Houston (Harris County) in 1955 has made deeper canyons of the city's downtown streets, spread its suburbs far and wide over the coastal plains, and put new muscles in its industrial strength.

Figures released by the Research and Statistics Department of the Houston Chamber of Commerce estimate that by the end of the year citizens of Metropolitan Houston will have built 18,000 new dwelling units valued at $156,000,000, which is on par with 1954 figures.

The 1955 version of the Houston skyline features such new buildings as the $11,750,000 Texas National Bank Building and $1,250,000 garage just completed; $16,000,000 Second National Bank Building nearing completion; $3,000,000 Tennessee Gas Transmission Company Garage; $1,000,000 National Bank of Commerce Garage expansion; $4,600,000 Houston Club Building; $425,000 Pigeon Hole Garage; and $5,000,000 Memorial Hospital Professional Building.

Extending the skyline for a considerable distance out South Main Street are such major construction projects as the $3,900,000 Medical Towers professional building near the Texas Medical Center; $40,000,000 Ada Oil Center; and two apartment buildings costing a total of $11,000,000.

New manufacturing plants for the Houston area include the East Texas Pulp and Paper Company's $30,000,000 plant at Evadale; $1,000,000 plant for the Sulphur Exploration Company at High Island; $7,000,000 plant for the W. K. M. Manufacturing Company at Missouri City; an ethylene plant for Phillips Chemical Company at Sweeney; $1,000,000 paper plant for sheet rock by the U. S. Gypsum Company; and $1,000,000 plant for Gould National Batteries.

Missouri Pacific Opens Huge Diesel Facility in Little Rock

It was a gala occasion in the city of North Little Rock, Ark., on Sunday afternoon November 13, when Missouri Pacific Lines threw open the gates to its huge, newly remodelled diesel facility and permitted a complete inspection of the plant by all the railroad's employes, their families, friends and other invited guests in the Greater Little Rock area.

Following the completion of the major phases of a tremendous reconversion program necessitated by the dieselization of Missouri Pacific's system lines, the North Little Rock facility, formerly one of the railroad's largest steam locomotive shops, held "Open House" to show what had been accomplished over several years of work and the expenditure of almost a million dollars.

Weeks of planning went into preparation for the big event. Invitations were mailed to the homes of every railroad employe of all classifications in the Greater Little Rock area. A tour route was laid out covering the entire grounds and buildings, and guides were specially trained to conduct the visitors through the plant. The tours ended in the paint shop where refreshment stands had been set up to dispense coffee and doughnuts and soft drinks. Souvenirs were distributed to adults and children, and attendance prizes were awarded. Gates were opened at 11:00 a.m., and crowds were continuous throughout the day; the machine count revealing that well over 5,000 persons had passed through the facilities before the closing time at 5:00 p.m.

$1,000,000 conversion from steam locomotive to diesel shops completed at North Little Rock, Ark.

The North Little Rock facility takes care of all the diesel locomotives regularly assigned to the railroad's Southern District. While some require only routine inspection, washing and refueling, others undergo major maintenance work but altogether they average 100 locomotives per day handled through the facility.

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Write for Catalog MB-1.5

Standard Steel Spring Division

ROCKWELL SPRING AND AXLE CO.
4001 East Seventh Avenue • Gary, Indiana

WHO'S WHERE

Olin P. Lee has been appointed southern credit manager of the **Robert Gair Company, Inc.,** manufacturers of paperboard and paper products, Ernest Meyer, treasurer, has announced.

Mr. Lee will report to Harry Koehler, general credit manager, and will make

Olin Lee

his headquarters at Atlanta, Ga. He will ultimately be in charge of the credit functions for six Gair container plants in the South and will be available to advise on credits in the southern states generally.

Before joining Gair, Mr. Lee was with the Texas Company in Atlanta. He received a BA degree in business administration from the University of Georgia.

• • •

R. J. Rice of **The International Nickel Company, Inc.,** has been appointed to the staff of the University of Texas M. D. Anderson Hospital and Tumor Institute as a Consultant in Analysis of Trace Elements.

He has also been named a member of the Industrial Advisory Team of the Houston Chamber of Commerce.

Mr. Rice is in charge of the Texas Technical Field Section of International Nickel's Development and Research Division. His headquarters are in Houston.

Arthur C. York has been named salesman for **National Electric Products Corporation's Charlotte, North Carolina** sales district, according to an announcement made recently by the electrical manufacturer's sales vice president, Mr. R. C. Bennett, Jr.

A 1949 graduate of the College of William and Mary at Williamsburg, Virginia, Mr. York has had experience in expediting deliveries of electrical products from manufacturers to distribution and supply organizations.

• • •

Appointment of **E. Clarence Oden** as development section head was announced by Dr. Frank J. Soday, vice president and director of research and development for **The Chemstrand Corporation.**

Prior to joining Chemstrand, Mr. Oden was president and consulting engineer with International Petroleum and Chemical Exchange, Inc. at Lake Charles, Louisiana. Before this period, he was chief process engineer with Cities Service Refining Corporation for ten years and development engineer with Mathieson Magnesium plant, both located at Lake Charles. During his career, he has served in teaching capacities at Michigan State College, University of Detroit, University of Michigan and New York Agricultural and Technical Institute.

Mr. Oden is a native of Cullman, Alabama.

• • •

Walter W. Peacock, Jr., of Boston has been named sales manager of the polyvinylchloride division of **Escambia Bay Chemical Corporation,** it was announced by M. A. Abernathy, president, of Shreveport.

Ecambia Bay will erect a multi-million dollar plant at Pensacola, Florida, for the manufacture of raw materials for the plastics industry. The firm is now nearing completion on a giant ammonium nitrate plant at the same location.

• • •

The Gas Processes Division of **The Girdler Company, Louisville, Ky.,** has made a number of organizational changes to further streamline its operations. Girdler is a division of the National Cylinder Gas Company, Chicago.

Dr. R. M. Reed has become Technical Advisor to Executive Vice President W. R. Wood. He was formerly head of the Technical Department.

C. J. Randolph has been appointed Assistant Chief Engineer in charge of the Process Section and F. A. Hilinski has been appointed Assistant Chief Engineer in charge of the Project Section. They will carry out their assignments under the direction of J. D. Gordon, who continues as Chief Engineer of the Engineering Department.

The newly established Process Section, supervised by Mr. Randolph is divided into three groups. They are the Process Design Group, headed by **J. M. Jackson;** the Operating Group, headed by **C. C. Brewer,** and the Process Development Group, headed by **Norman C. Updegraff.**

• • •

The Trane Company, La Crosse (Wis.) manufacturer of air conditioning, heating, ventilating and heat transfer equipment, has announced the appointment of **William L. Mullins** to its **Oklahoma City** sales office. Mullins has previously been associated with the Trane office at Memphis.

A graduate of the University of Louisville, Mullins has a degree in civil engineering. He also completed the Trane graduate training program, and is a veteran of several years' engineering experience.

• • •

Appointments of ten supervisory officials to the management staff of **Pittsburgh Plate Glass Company's** 34-million dollar plate glass manufacturing plant currently under construction at Cumberland, Maryland, has been announced by Robert M. Hainsfurther, manager of the ultra-modern plant.

Robert H. Loffert, assistant of the tank department at Creighton, Pennsylvania, has been appointed assistant superintendent and will be assigned to various departments, probably starting in the tank department.

John B. White, superintendent of the tank department at Ford City, Pennsylvania, has been named superintendent of production and will supervise all production departments and yard operations.

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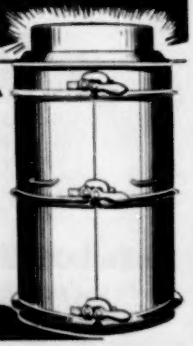

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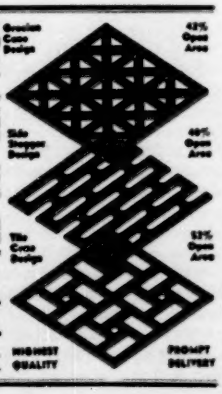

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Sales Representatives in all principal cities. Consult Your Classified Telephone Directory.

John W. Nelley, formerly with Glass Division Engineering in the company's Pittsburgh headquarters, has been appointed superintendent of the tank department.

Richard H. Ross, general foreman of the tank department at Creighton, has been appointed general foreman of the tank department at Cumberland.

Harry A. Smith, Jr., general foreman of the grinding and polishing department at Creighton, has been named superintendent of grinding and polishing.

Robert C. Perry, assistant superintendent of the polishing and grinding department at Crystal City, Missouri, has been appointed to a similar position at the Cumberland plant.

John W. Lillits, general foreman at Ford City, has been named wareroom superintendent.

Ray G. Joiner, methods engineer at Ford City, has been appointed chief industrial engineer.

Harry S. Drury, Jr., formerly mechanical engineer at Crystal City and more recently with Glass Division Engineering has been named plant engineer.

Roy W. Yunker, electrical engineer at Creighton, has been appointed plant engineer.

• • •

The appointments of four district managers for lumber products in the **Forest Products Division of Olin Mathieson Chemical Corporation** were announced by Paul R. Vickery, sales manager, Lumber Products. The four appointments represent new positions in the division.

The following have been named district managers, Lumber Products: **C. L. Everett** for Texas—except West Texas, **H. G. Brewer**—West Texas, New Mexico, Oklahoma and Kansas, **W. L. McCrocklin**—Louisiana and Arkansas, **M. W. Boeke**—Missouri, Illinois, Indiana, and Ohio.

These four district managers have been sales representatives in their respective territories prior to the consolidation of Brown Paper Mill Company, Inc. into Olin Mathieson's Forest Products Division.

• • •

Louisville and Nashville Railroad Company has announced effective November 16, 1955 **Mr. Claude M. Beeler** is appointed District Freight Agent at Owensboro, Ky.

In addition the following appointments are effective November 16, 1955:

Mr. George M. Reynolds, Jr., Freight Traffic Agent, Detroit, Mich.

Mr. Albert L. Nash, Freight Traffic Agent, Pittsburgh, Pa.

Mr. Curry E. Thomas, Freight Traffic Agent, Cincinnati, Ohio.

• • •

W. O. W. Smith, Jr., has joined the **Rockford Clutch Division of Borg-Warner Corp.** as a sales engineer and direct factory representative in the western oil fields. Widely experienced in the power engineering field of the petroleum industry, Mr. Smith formerly was associated with the Buda Engineering and Equipment Co. and the Waukesha Sales and Service Co., both in Houston, Tex. He is a graduate of the University of Houston.

As Rockford Clutch's representative Mr. Smith will make his headquarters at 3918 Anita St., Houston. Rockford Clutch produces engine power take-offs and clutches of various sizes and types for use on engines and other oil field equipment.

• • •

Seaboard Air Line Railroad Company has announced that **Mr. H. S. Coltrain** is appointed District Freight Agent, Lake Wales, Fla., succeeding Mr. H. W. Heppeler, whose retirement has been announced.

Furthermore, **Mr. R. I. Webb** is appointed Commercial Agent, Miami, Fla., succeeding Mr. H. S. Coltrain, promoted.

• • •

Clay R. Brahm recently joined the sales staff of the Pennsylvania Salt Manufacturing Co.'s Metal Processing Chemicals Dept., sales manager J. J. Duffy has announced. He is a native of St. Louis and has been assigned to the company's St. Louis territory.

Mr. Brahm, a chemical engineer and a graduate of the University of Missouri, was associated with the Allied Chemical & Dye Corp. for the past 5 years. He will replace Frank Wilcher, recently transferred to Louisville.

• • •

W. M. Champion has been appointed district manager of **Air Reduction's Shreveport, Louisiana,** sales office, effective October 5, 1955, it was announced by A. C. Brown, Jr., general sales manager.

Mr. Champion, replacing John Lund who left the company, has been with Airco since 1946, serving in various sales capacities at the Oklahoma City office. Since July, 1954, he held the position of assistant sales manager there.

• • •

The appointment of **William A. Neighbors** as **Atlanta** district residential sales manager for the **Unitary Equipment Division of Carrier Corporation** was announced by Corwin Robertson, Division district manager.

Mr. Neighbors succeeds Tom Ware, who joins Carrier-Houston Corporation, the company's newly-formed distribution subsidiary handling Carrier Unitary Equipment Division products in the Houston, Texas, trading area.

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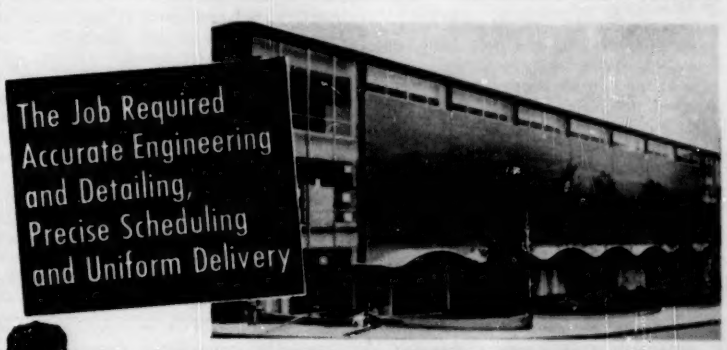
John S. Hayes of St. Louis has been appointed director of the engineering department of **Monsanto Chemical Company's** Research and Engineering Division, it was announced.

• • •

Russell M. Allen, Vice President in Charge of Sales, **Allegheny Ludlum Steel Corporation,** has just announced the appointment of **Neale Carter** to the Birmingham District Sales Office. Mr. Carter will handle all products of the specialty steel company in the Birmingham area.



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Supplying the reinforcing steel for Rich's new five story department store in Knoxville, Tennessee, called for exceptional service by Connors.

Connors' "extraordinary performance" in supplying this service was commended highly in letters received recently from officials of Batson-Cook Company, General Contractors, West Point, Ga.

This correspondence states: "This is one of the outstanding construction performances of our experience, considering volume of concrete poured . . . lack of storage space, and accelerated schedule . . . we are aware that it would have been impossible without the services you rendered."

You can enjoy the same complete, accurate, and dependable service on **your** next project by specifying Connors' reinforcing steel . . .

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BUSINESS NOTES

The Cameron & Barkley Company, distributor of industrial supplies, with branches at **Charleston, S. C., Savannah, Ga., and Jacksonville, Tampa, Orlando and Miami, Fla.,** has become distributor for Multi-Amp, a portable high current test instrument manufactured by the **Multi-Amp Corporation of Newark, N. J.**

Sales and service of Multi-Amp test instruments will be coordinated under Charles Von Glahn, Manager of Cameron & Barkley's Electrical Division.

• • •

Appointment of **Homer G. Maxey & Co., Lubbock, Tex.,** as distributor for **Chambers Rangers, Inc.,** was announced recently.

A. H. Scheffer, the Indianapolis firm's sales manager, said the new distributor will handle Chambers built-in cooking units in Lubbock and the surrounding trading area.

The Texas firm will be served by Forest N. Hall, Dallas, Chambers' Western Division manager.

• • •

The **Jell-O Division of General Foods Corporation** will reopen its southern region sales office in **Atlanta, Georgia,** and its district sales office in **Memphis, Tennessee,** on January 1, 1956, it was announced by Charles A. Kolb, national sales manager. These offices were closed when GF regrouped its sales organization in 1954.

George Rader, now Boston district sales manager for the Jell-O Division, has been appointed regional sales manager of the new southern region. **Thomas Hughes,** now sales manager in the Kansas City district of GF's Baker-Gaines Division, has been appointed district sales manager for the Jell-O Division in Memphis.

• • •

The official opening of three enlarged warehouses which combine sales and warehousing into a unified operation in **Atlanta, Chicago** and **San Francisco** was announced by George A. Fitzgerald, Vice President, Industrial Sales, **Permacel Tape Corporation.** The new facilities are part of Permacel's national program to streamline its customer services.

These three new warehouses bring the total to five openings within the year. The other two were opened earlier this year in **Dallas** and **Detroit,** respectively.

• • •

The opening of a new District Office in **Jacksonville, Florida,** has been announced by **Century Electric Company of St. Louis, Missouri.** The new Century Office will be under the direction of **Mr. Burton E. Tebo,** formerly of Century's Branch Office in Atlanta, Georgia.

Serving as a stock point for Century Electric Motors, the new District Office will serve all of the state of Florida except the city of Pensacola and territory east of the Appalachicola River. Century's Atlanta Office will continue under the direction of Mr. R. E. Lynch.

• • •

Noland Company, Incorporated, opened its 29th Branch recently at 357 Court Avenue through acquisition of the Memphis Plumbing and Heating Supply Company, **Memphis, Tenn.,** according to an announcement by Lloyd U. Noland, Jr., President of the Company.

This new facility will enable Noland Company to provide greater and more concentrated coverage of its mid-south territory, between present operations at Jackson, Mississippi and Nashville, Tennessee, Mr. Noland stated.

James L. Kerr, formerly Manager of Noland Company's Richmond, Virginia Branch, will assume management of the Memphis organization—consisting largely of Memphis men and women of the predecessor Company.

• • •

R. Hoe & Co., New York City, located new southeastern manufacturing branch at 1809 English St., **High Point, N. C.** for the manufacture of carbide tipped circular saws and tools. Will employ 40 people.

• • •

Nachman Corporation, Chicago, manufacturers of springs units, located new sales office and warehouse in **High Point, N. C.** Will employ 10 people.

• • •

Establishment of new district offices in Youngstown, Ohio; Wichita, Kansas; **San Antonio, Texas;** Evansville, Indiana; and **Nashville, Tennessee,** has been announced by Mr. E. W. Petersen, sales manager of **American Blower Corporation, Detroit 32, Michigan.** The five new locations will expand to 53 the number of American Blower district offices for providing assistance to users of air handling, heating, air conditioning and fluid drive power transmission equipment and refrigerating machines in the United States.

W. F. Markey heads up the new district office at San Antonio. A Notre Dame graduate with a degree in mechanical engineering, Markey has been with American Blower since 1951.

The Nashville office will be managed by **B. G. Kemp** who transfers from the company's Cincinnati office. Kemp has been with American Blower since 1950 and is a mechanical engineering graduate of Tennessee Polytechnic Institute.

• • •

Franchisement of **Specialties, Inc., 1406 Leslie Avenue, Alexandria, Virginia,** as distributor of **Parker** synthetic rubber o-rings for sealing applications is announced by D. A. Cameron, general sales manager of Parker Appliance Company, Cleveland, Ohio.

• • •

The Brazos Oil and Gas Company, a wholly-owned subsidiary of **The Dow Chemical Company** since it was formed in 1946, has been absorbed by the parent company, Dow president Dr. Leland I. Doan has announced.

The newly-merged organization will become the Brazos Oil and Gas Company division of Dow, Dr. Doan said. The merger was one of the first to be effected under the recently-revised Texas corporation code.

Headquarters will continue in **Houston** and personnel, headed by **L. B. Swan** as division general manager, will remain unchanged. Activities of the division will come under the direction of **Dr. A. P. Beutel,** Dow vice president and general manager of the Texas Division. Until the merger, Dr. Beutel served as president of Brazos Oil and Gas.

• • •

Rock Island Lines has created a new freight traffic district in the southeast with headquarters in **Atlanta, Georgia.**

Lloyd L. Thoms, presently assistant freight traffic manager in Chicago, has been named southeastern freight traffic manager to head up the new territory. The change was effective November 1.

Mr. Thoms' jurisdiction will cover Virginia, North and South Carolina, Mississippi, Alabama, Georgia, Florida and Tennessee with the exception of Memphis.

In addition he will supervise traffic matters in New Orleans and in the territory east of the Mississippi between Baton Rouge and New Orleans.

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WELCH CHAMBER OF COMMERCE

C. H. Fletcher, Secretary

BOX 347 — WELCH, WEST VIRGINIA

Memphis Plant Safety Record Wins Record for Parent Firm

Procter & Gamble completed a grand slam in world safety records in all of its manufacturing operations with the announcement that the cellulose pulp mill of its Memphis subsidiary, The Buckeye Cotton Oil Company, has set a new safety record in the pulp industry.

In the three other fields in which P&G has manufacturing operations—soaps and related products, fats and oils, and shell-loading (explosives)—the company already holds the world records for employee safety on the job.

A celebration was held in Memphis last month honoring the pulp mill's 653 employees who have worked since August, 1953, without having a single accident serious enough to cause loss of time from work. The mill, which has exceeded by a considerable margin the previous pulp industry record of 2,612,656 accident-free hours worked, has consistently plugged for the record, going past a million safe man-hours four times in the last eight years.

A-Power Pioneer to Locate Drafting Division In Orlando

One of the world's pioneers in commercial and atomic power equipment is coming to Orlando within the next 30 days, it was reported recently.

Combustion Engineering, Inc., New York, one of the two largest manufacturers of steam generating equipment is establishing an engineering design and drafting division at 128 S. Garland St. The building was formerly occupied by Austin, Inc., a furniture store.

Milton D. Blanck, manager of the Orlando Industrial Board, said all negotiations have been completed and the company expects to begin operations in about a month in the leased quarters.

Combustion Engineering has plants in Chattanooga, Tenn.; East Chicago; Chicago; Monongahela, Pa.; and St. Louis.

Subsidiaries operate plants in Canada, France, England and Mexico.

NEW PLANTS

(*Continued from Page* 16)

let contract to Suggs Constr. Co., Box 349, Big Spring, for Tennison "7" building addition at Avenue D & 6th St.

PALESTINE—Missouri Pacific Lines plans $200,000 office building. O. L. Hazelwood, 14 Link Bldg., Palestine, Archt.

PLAINVIEW—Pioneer Natural Gas Co. received bid of $65,000 from Honeycutt Constr. Co. for gas building. Atcheson & Atkinson, Sanford Bldg., Lubbock, Archts.

SAN ANTONIO—Alamo Paint & Wall Paper Co., Inc., 1119 W. Commerce St., received bid from Frank A. Miceli, 710 Avenue A, San Antonio, at $186,816 for warehouse and rental showroom at 711 Culebra St. Malcolm G. Simons, 526 Aztec Bldg., Archt.

SPRING BRANCH—J. Weingarten, Inc., Houston, received bid from Marshall Constr. Co., 4009 Center St., Houston, at $326,970 for commercial building on 8-acre tract, N.E. cor. Long Point and Wirtz Roads. Rustay & Martin, 1811 Crawford St., Houston, Archts.

VIRGINIA

BREMO BLUFF—Virginia Electric & Power Co. let contract to Stone & Webster Engr. Corp. at $22,000,000 for addition to power station.

CHESTERFIELD CO.—Reynolds Metals Co. let contract to Wise Contracting Co., Richmond, Va., for extrusion plant.

HENRICO CO.—Sutton Co., Inc., Charles City Rd. received bid from M. E. Howard Constr. Co., Richmond, at $25,824 for office building. J. Albert Heisler, Richmond, Archt.

LURAY—Virginia Telephone & Telegraph Co. let contract to Caughan Construction Co., Luray, at $23,980 for dial exchange building. Stainback & Scribner, Charlottesville, Va., Archts.

YORKTOWN—American Oil Co. let multi-million dollar contract for three major operating units of company's 35,000 bbl. per day refinery.

WEST VIRGINIA

WEIRTON—National Steel Corp., Pittsburgh, plans expansion of Weirton plant, part of $200,000,000 expansion program over 3-yr. period.

WHEELING—Wheeling Steel Corp., John L. Heudoerfer, president, plans $65,000,000 expansion and improvement program.

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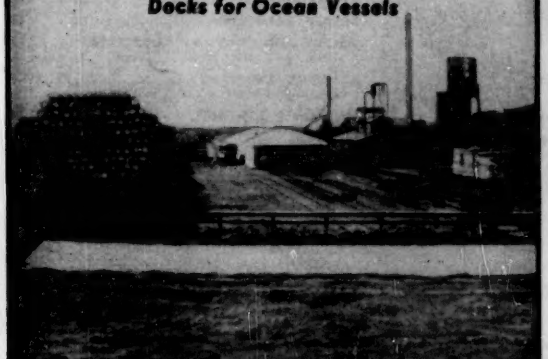

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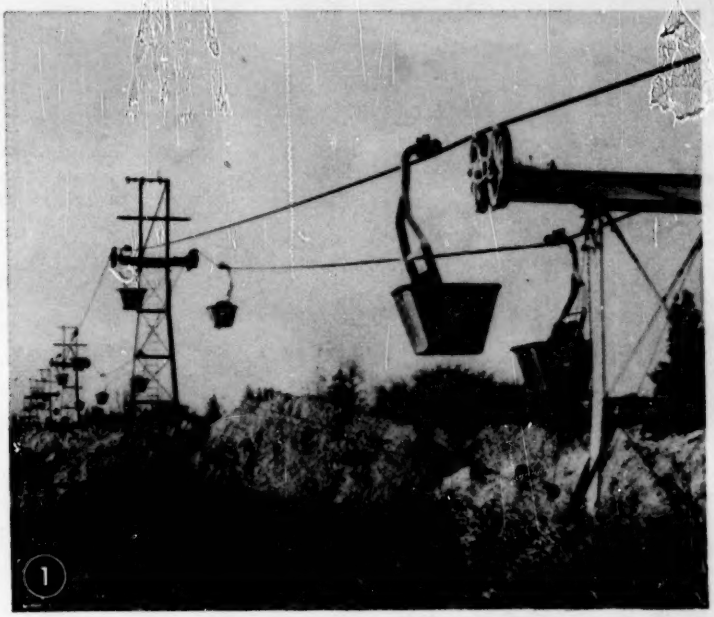

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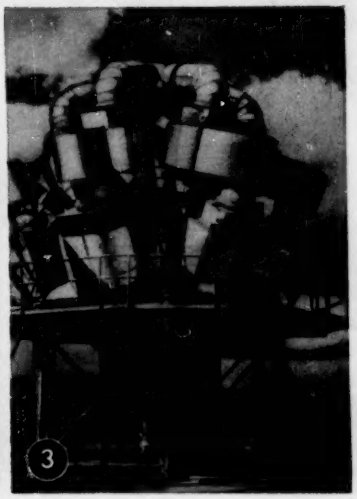

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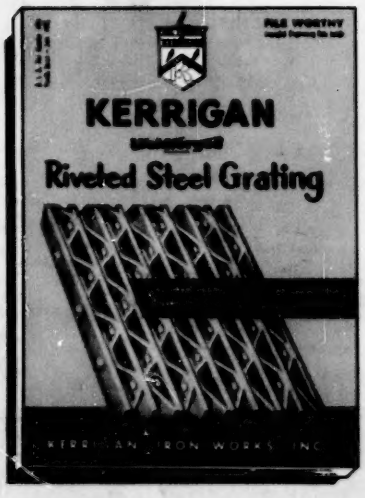

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